MEDICAL SCHOOL OF
HARVARD UNIVERSITY

MASSACHUSETTS
EYE AND EAR INFIRMARY

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Massachusetts Eye and Ear Infirmary

ONE HUNDRED and TWENTY SIXTH

ANNUAL REPORT

1951

BOSTON • MASSACHUSETTS

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Massachusetts Eye and Ear Infirmary

ONE HUNDRED and TWENTY SIXTH ANNUAL REPORT

1951

243 Charles Street, Boston 14, Massachusetts
Telephone: LAfayette 3-8230

BOSTON • MASSACHUSETTS

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Research at the Infirmary not only helps in the treatment of those now threatened with blindness or deafness, but also seeks new and better ways of safeguarding eyesight and hearing in the future.

MASSACHUSETTS EYE AND EAR INFIRMARY

INCORPORATED IN 1827

The Massachusetts Eye and Ear Infirmary and its Out-Patient Clinics serve men, women and children from all over New England and beyond, who need expert care for diseases and injuries of the eyes, ears, nose and throat. Established in 1824, the Infirmary is one of the two oldest hospitals of its kind in the country, devoted to the preservation of good eyesight and sound hearing.

The Infirmary's patients are now benefiting from the many improvements and modernizations resulting from the Building Program. This recent reconstruction provides our fine Staff of specialists with the medical facilities their skill requires and give our patients the accommodations and comforts needed to make their recovery rapid and pleasant.

The Infirmary is a voluntary hospital — an independent, non-profit, private institution. The Board of Managers are non-paid and the Medical Staff of specialists give their services without charge to patients in the clinics and on the wards. The hospital receives no support from city or state but is financed by receipts from patients, by voluntary gifts and bequests, and by its share in the Community Fund, as a "Red Feather Service." However, the Infirmary's allotment from the Community Fund does not cover the amount the hospital gives in "free service" to patients from the Greater Boston area who cannot pay for their own care.

In many ways the Infirmary and the Massachusetts General Hospital, its neighbor, cooperate to give complete medical service to patients. The clinics of both hospitals share a common Admitting Office with its entrance on Fruit Street. Also, for maximum efficiency and economy in operating, the two hospitals unite in such matters as purchasing, maintenance and personnel management.

The wards and out-patient clinics of the Infirmary are open only to those who are not able to pay doctors' fees. However, all patients, in the clinics and wards as well as in the private accommodations, are under the medical and surgical care of the Staff who are specialists in Ophthalmology and Otolaryngology.

Whenever the patient is already under the care of a doctor, arrangements for his admission should be made by the doctor, or the patient should bring a letter from the doctor recommending admission to the Infirmary. However, any patient who is not under the care of a doctor and who is not able to pay for private care, is eligible for treatment in the clinics and wards. In cases of emergency, of course, the patient is admitted immediately at any time of the day or night.

The clinics, located in the adjoining Out-Patient Department on Fruit Street, are open daily except Sunday and legal holidays for a fee of $2.50* per clinic visit. After a preliminary interview, outpatients are examined by the clinic doctor and treatment is prescribed. If further treatment is necessary, the clinic patient is given an appointment for his next visit, as all but the first visit are by appointment only.

Patients are admitted to the wards by appointment with the Admitting Office, 243 Charles Street, from 9 to 10 A.M. daily except Sunday and legal holidays. Arrangement for admission to private accommodations is made by the Staff doctor in charge of the patient and the patient is then admitted through the Infirmary Admitting Office.

Daily rates for board and room for ward patients are $14* with special services like X-ray and operating room fees, extra. Rates for child patients are $14* in the ward, with semi-private charges of $16*. Semi-private care, on the fourth floor, is in four, five and six bed rooms at $16* per day. Private care is $19* to $22* for single room with lavatory, and $21* to $24* for single rooms with bathroom. These rates include general nursing and ordinary medicine.

Blue Cross (Associated Hospital Service) plans are accepted at the Infirmary, the benefits being allowed as soon as approval has been received. All other non-profit insurance is handled by the patient for himself and he pays the regular rates to the hospital.

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*As of April, 1952.

Officers

BOARD OF MANAGERS 1952

President	Henry Hixon Meyer, 53 State Street, Boston		1937
Secretary	Edmund V. Keville, 294 Washington Street, Boston	1942-43	1945
Treasurer	Horace W. Frost, 74 State Street, Boston		1940

William H. Claflin, III	74 State Street, Boston	1947
Mrs. Richard Cary Curtis	215 Warren Street, Brookline	1940
Wallace Falvey*	10 Post Office Square, Boston	1950
Robert H. Hopkins	82 Devonshire Street, Boston	1951
James C. Howe	53 State Street, Boston	1914
Rev. Robert G. Metters	15 Newbury Street, Boston	1948
Patrick A. O'Connell*	154 Tremont Street, Boston	1934
William A. Parker	200 Berkeley Street, Boston	1935
Mrs. Sullivan A. Sargent	701 South Street, Needham	1945
Walter H. Trumbull	185 Meadow Brook Road, Weston	1929
Frederic Winthrop	Ipswich, Massachusetts	1943

* appointed by the Commonwealth

Corporation

(in addition to Managers)

William S. Ballard	45 Milk Street, Boston
Robert F. Bradford	106 Coolidge Hill Road, Cambridge
Melville Chapin	84 State Street, Boston
Mrs. John W. Farley	898 South Street, Needham
Nathaniel Faxon, M.D.	25 Chestnut Street, Boston
Francis W. Hatch, Jr.	84 State Street, Boston
Thomas H. Hoare	6 Beacon Street, Boston
William F. Keesler, Jr.	69 Homestead Street, Newton
Arthur T. Lyman	Westwood, Massachusetts
George A. McLaughlin	11 Pemberton Square, Boston
August R. Meyer	121 Clifton Street, Belmont
Harris P. Mosher, M.D.	127 Front Street, Marblehead
Miss Amelia Peabody	120 Commonwealth Avenue, Boston
George L. Pew	17 Storer Street, Portland, Maine
Henry K. Porter	74 Foley Street, Somerville
Edwin H. B. Pratt	16 Fayerweather Street, Cambridge
Huston Rawls	84 State Street, Boston
Honorable Leverett Saltonstall	82 Devonshire Street, Boston
Frederick H. Verhoeff, M.D.	395 Commonwealth Avenue, Boston
D. Harold Walker, M.D.	Tree Tops, Peterborough, N. H.
Howland S. Warren	1 Federal Street, Boston

Executive Committee: Mr. Meyer, Mr. Frost, Mr. Claflin, Mr. Metters

Finance Committee: Mr. Meyer, Mr. Frost, Mr. Parker

Social Service Advisory Committee: Mr. Falvey, *Chairman:* Mr. Metters, Mrs. Kazanjian, Mrs. Soule, Merrill J. King, M.D.; Moses H. Lurie, M.D., Mr. Howe, Miss Meenan

Public Relations Advisory Committee: Mr. Hatch, *Chairman;* Mr. August Meyer, David G. Cogan, M.D.

House Committee: Mrs. Farley, *Chairman;* Mr. Claflin, M.D., Harry E. Braconier, M.D., Donald K. Lewis, M.D.

Administration

Director	Francis S. Hill
Assistant to the Director	Mrs. Geneva L. Wayland, R.N.
Administrative Assistants, Admitting Office	Ruth M. Hutchinson, R.N. Walborg L. Peterson, R.N. Henrietta Olsen, R.N. Martha Davidson, R.N.
Superintendent, Nursing Service; Training School	Dorothy M. Tarbox, R.N.
Assistant Superintendent, Nursing Service; Training School	Hilda G. Blaisdell, R.N.
Accounting	Raymond W. Lyons
Dietary	Mrs. Grace Lucey
Medical Social Service	Isabel Whiting
Optical Shop	Albert E. Maver
Occupational Therapy	Mrs. Patricia Huddleston
Public Relations	Mrs. Virginia Gerould
Volunteers	Phyllis B. Scott

Affiliated Department Heads

Advisor to Superintendent of Nursing Service; Training School	Ruth Sleeper, R.N.
Credit Manager	Frances M. Hernan
Coordinating Comptroller	Lawrence Martin
Director, Department of Dietetics; School of Dietetics	Louise Hatch
Director, Personnel Department	Mrs. Lois D. McCoy
Maintenance	Raymond V. Kinsman
Medical Records	E. Louise Seymour, R.R.L.
Out-Patient Department	Margaret Meenan, R.N.
Pharmacy	John Murphy
Purchasing	Allen H. Mathewson

Service Pin Awards

Mrs. Helen F. Kirwin
Social Service — 30 years

Mrs. Ruth B. Adair
Social Service — 20 years

Frank Johnson
Maintenance — 20 years

Robert Whalen
Nurses' Residence — 20 years

Teresa McQuade, R.N.
Nursing Department — 10 years

Martha Davidson, R.N.
Admitting Office — 10 years

Viola H. Hult
Nurses' Aide — 10 years

Mrs. Mildred James, R.N.
Nursing Department — 10 years

Mrs. Lois Metzler, R.N.
Nursing Department — 10 years

Miss Elizabeth Towle
Secretary to the Winthrop Foundation — 10 years

Department of Ophthalmology

Chief of Ophthalmology

Edwin B. Dunphy, M.D.

Consulting Chief of Ophthalmology

Frederick H. Verhoeff, M.D.

Surgeons in Ophthalmology

Benjamin Sachs, M.D.
Paul A. Chandler, M.D.
William P. Beetham, M.D.
Virgil G. Casten, M.D.
Trygve Gundersen, M.D.
Merrill J. King, M.D.

Director of Pathology Laboratory

Parker Heath, M.D.

Associate Surgeons in Ophthalmology

David G. Cogan, M.D.
Brendan D. Leahey, M.D.
Hugh C. Donahue, M.D.

Assistant Surgeons in Ophthalmology

Harry E. Braconier, M.D.
Thomas Cavanaugh, M.D.
A. William Collinson, M.D.
Edward E. Covitz, M.D.
Mahlon T. Easton, M.D.
Paul G Haire, M.D.
Carl C. Johnson, M.D.
Sumner D. Liebman, M.D.
S. Forrest Martin, M.D.
Henry A. Mosher, M.D.
Abraham Pollen, M.D.
Karl Riemer, M.D.
Earl S. Seale, M.D.
Albert E. Sloane, M.D.
Garrett L. Sullivan, M.D.

Assistants in Ophthalmology

Henry F. Allen, M.D.
Frederic Breed, M.D.
Robert J. Brockhurst, M.D.
Julian F. Chisholm, Jr., M.D.
Joseph M. Clough, M.D.
Thomas P. Cronin, M.D.
Edwin B. Goodall, M.D.
W. Morton Grant, M.D.
Warren D. Haley, M.D.
Linley C. Happ, M.D.
Joseph Lo-Presti, M.D.
Charles H. MacLaughlin, M.D.
Irwin T. Mancall, M.D.
Arthur M. Morrissey, M.D.
Bertha Offenbach, M.D.
Richard B. Pippitt, M.D.
Paul M. Runge, M.D.
Charles L. Schepens, M.D.
David H. Scott, M.D.
Taylor R. Smith, M.D.
William Stone, M.D.
Francis J. West, M.D.
M. Wayne Woodard, M.D.

Residents in Ophthalmology

Peter Beck, M.D.
David D. Donaldson, M.D.
Herbert Giller, M.D.
Joseph Ginsberg, M.D.
David S. Johnson, M.D.
Robert Leavelle, M.D.
William Lincoff, M.D.
Ichiro Okamura, M.D.
Charles D. J. Regan, M.D.
Bernard Zeavin, M.D.

CONSULTING SURGEONS IN OPHTHALMOLOGY

Peter H. Thompson, M.D.
Hugo B. C. Riemer, M.D.
J. Herbert Waite, M.D.
Edmund W. Clap, M.D.
Samuel H. Wilkins, M.D.
Fred S. Thorne, M.D.
Ralph H. Ruggles, M.D.

Department of Otolaryngology

Chief of Otology and Laryngology
LeRoy A. Schall, M.D.

Surgeons in Otolaryngology
Philip E. Meltzer, M.D.
Moses H. Lurie, M.D.
Robert L. Goodale, M.D.
Francis L. Weille, M.D.
Charles I. Johnson, M.D.
Maurice G. Evans, M.D.
Vincent J. Kelley, M.D.

Surgeon for Bronchoscopy and Esophagoscopy
Lyman G. Richards, M.D.

Surgeon for Tumor Clinic
Carl H. Ernlund, M.D.

Surgeon for Plastic Operations
Edgar M. Holmes, M.D.

Director of the Mosher Laboratory
Werner Mueller, M.D.

Associate Surgeons in Otolaryngology
John R. Richardson, M.D.
Charles H. Allman, M.D.
Walter J. E. Carroll, M.D.
John R. Frazee, M.D.
Joseph Lentine, M.D.
Burton E. Lovesey, M.D.
J. Charles Drooker, M.D.

Assistant Surgeons in Otolaryngology
Calvin M. Cerrato, M.D.
Elizabeth DeBlois, M.D.
George Kelemen, M.D.
Charles Kent, M.D.
Edward F. Lawlor, M.D.
Donald K. Lewis, M.D.
Daniel Miller, M.D.
Aram Roopenian, M.D.
Frank R. Shlossberg, M.D.
Herman J. Sternstein, M.D.
Bernard Zonderman, M.D.

Assistants in Otolaryngology
Herbert J. Dietrich, M.D.
Alfred T. Joseph, M.D.
Kenneth Kazanjian, M.D.
Joseph P. McEneaney, M.D.
John E. McKeigue, M.D.
Maurice Ruben, M.D.
Richard C. Webster, Jr., M.D.

Clinical Assistant for Bronchoscopy and Esophagoscopy
Edward B. Benedict, M.D.

Residents in Otolaryngology
Arcadius Hakim, M.D.
Daniel E. M. Martinez, M.D.
Raymond L. Pfister, M.D.
Piero Perone, M.D.
George F. Reed, M.D.
Earle W. Rice, M.D.
Yunis M. Saeed, M.D.
Edmundo T. L. Spinola, M.D.

CONSULTING SURGEONS IN OTOLARYNGOLOGY

Joseph L. Goodale, M.D.
D. Harold Walker, M.D.
Frederick E. Garland, M.D.
Frederick L. Bogan, M.D.
Harry A. Barnes, M.D.
Harris P. Mosher, M.D.
Leon E. White, M.D.
George H. Poirier, M.D.
Edwards Herman, M.D.
Varaztad H. Kazanjian, M.D.
Harold H. Tobey, M.D.
Gustave B. Fred, M.D.
Philip Mysel, M.D.
Josiah E. Quincy, M.D.

Chief of Anesthesia Department
Henry K. Beecher, M.D.

Roentgenologist
A. S. Macmillan, M.D.

Pediatrician
Allan M. Buttler, M.D.

Consulting Physicians

Walter Bauer, M.D.
F. Dennette Adams, M.D.
Fuller Albright, M.D.
Joseph C. Aub, M.D.
Chester M. Jones, M.D.
Robert S. Palmer, M.D.
Myles P. Baker, M.D.
Edward F. Bland, M.D.
Earle M. Chapman, M.D.
Greene Fitz-Hugh, M.D.
Francis T. Hunter, M.D.
Alfred Kranes, M.D.
Jacob Lerman, M.D.
Helen S. Pittman, M.D.
Marion W. Ropes, M.D.
Charles L. Short, M.D.
David D. Rutstein, M.D.
Howard B. Sprague, M.D.
Conger Williams, M.D.
Dana L. Farnsworth, M.D.
Paul C. M. Zamecnik, M.D.
Allen G. Brailey, M.D.

Walter S. Burrage, M.D.
John W. Cass, Jr., M.D.
Richard W. Clark, M.D.
Milton H. Clifford, M.D.
Briant L. Decker, M.D.
John H. Fay, M.D.
Reed Harwood, M.D.
William R. Hill, M.D.
Bernard M. Jacobson, M.D.
John P. Monks, M.D.
Milton J. Quinn, M.D.
George P. Sturgis, M.D.
Roy R. Wheeler, M.D.
John W. Zeller, M.D.
Arthur L. Watkins, M.D.
John B. Stanbury, M.D.
Perry J. Culver, M.D.
Anne P. Forbes, M.D.
Thomas F. Paine, Jr., M.D.
Janet W. McArthur, M.D.
Gordon S. Myers, M.D.
Robert L. Berg, M.D.

Consulting Dermatologists

Chester N. Frazier, M.D.
Jacob H. Swartz, M.D.
John Adams, Jr., M.D.

Mildred Ryan, M.D.
Maurice M. Tolman, M.D.
William R. Hill, Jr., M.D.

Walter F. Lever, M.D.

Consulting Pathologists

Donald C. Sniffen, M.D.
Francis T. Hunter, M.D.
Benjamin Castleman, M.D.

Michael A. Luongo, M.D.
Austin L. Vickery, Jr., M.D.
Robert E. Scully

Robert H. Fennell, M.D.

Consulting Radiologists

Laurence L. Robbins, M.D.
Milford D. Schulz, M.D.
Stanley M. Wyman, M.D.

James J. MacCort, M.D.
Joseph Hanelin, M.D.
William R. Eyler, M.D.

Consulting Endoscopist
Edward B. Benedict, M.D.

Consulting Bacteriologist
Louis Dienes, M.D.

Consultant in Contagious Disease
Edwin H. Place, M.D.

Consultant in Preventive Medicine
John E. Gordon, M.D.

Consultant in Pharmacology
Otto Krayer, M.D.

Consulting Urologists

Fletcher H. Colby, M.D.
Sylvester B. Kelley, M.D.

Howard I. Suby, M.D.
Walter S. Kerr, M.D.

Lorande M. Woodruff, M.D.

Consulting Neurologists

Raymond D. Adams, M.D.
G. Colket Caner, M.D.
John A. Abbott, M.D.
Edward P. Richardson, M.D.
Madelaine R. Brown, M.D.
Edwin M. Cole, M.D.
Robert S. Schwab, M.D.

Consulting Psychiatrists

Stanley Cobb, M.D.
Erich Lindemann, M.D.
Paul Howard, M.D.
Lucie J. Jessner, M.D.
Herbert Barry, Jr., M.D.
R. Barry Bigelow, M.D.
Vernon P. Williams, M.D.
Alfred O. Ludwig, M.D.
Henry H. Brewster, M.D.
Volta R. Hall, M.D.
LeMoyne White, M.D.
Daniel C. Dawes, M.D.
Avery D. Weisman, M.D.
Elizabeth Zetzel, M.D.

Consulting Pediatricians

John A. V. Davies, M.D.
Clement A. Smith, M.D.
Joseph Garland, M.D.
Ralph A. Ross, M.D.
Nathan B. Talbot, M.D.
Eli C. Romberg, M.D.
Richard C. Tefft, Jr., M.D.
Francis C. McDonald, M.D.
William J. Turtle, M.D.
Gertrud C. Reyersbach, M.D.
Leo B. Burgin, M.D.
Louis Weinstein, M.D.
Ralph W. Daffinee, M.D.
Arthur J. Linenthal, M.D.
Edward C. Dyer, M.D.
Louis I. Skirball, M.D.
William McL. Wallace, M.D.
Eleanore C. Zaudy, M.D.
T. Berry Brazelton, M.D.
Allen Cohen, M.D.
Charles D. Cook, M.D.
John D. Crawford, M.D.
William A. Dickson, M.D.
Theodore S. Golden, M.D.
Samuel Kaplan, M.D.
Joseph L. Lewis, M.D.
Kenneth F. Sands, M.D.

Consulting Surgeons

Edward D. Churchill, M.D.
Leland S. McKittrick, M.D.
Robert R. Linton, M.D.
Horatio Rogers, M.D.
Richard H. Sweet, M.D.
Oliver Cope, M.D.
Grantley W. Taylor, M.D.
E. Parker Hayden, M.D.
Henry H. Faxon, M.D.
Marshall K. Bartlett, M.D.
Ira T. Nathanson, M.D.
Claude E. Welch, M.D.
Bradford Cannon, M.D.
Lamar Soutter, M.D.
Gordon A. Donaldson, M.D.
Ward I. Gregg, M.D.
Edward Hamlin, Jr., M.D.
Fred A. Simmons, Jr., M.D.
Richard Warren, M.D.
Howard Ulfelder, M.D.
Francis M. Ingersoll, M.D.
John B. McKettrick, M.D.
J. Gordon Scannell, M.D.

Consulting Neurosurgeons

James C. White, M.D.
William H. Sweet, M.D.
H. Thomas Ballantine, Jr., M.D.

Consulting Orthopedists

Joseph S. Barr, M.D.
Armin Klein, M.D.
William A. Rogers, M.D.
Edwin F. Cave, M.D.
Paul L. Norton, M.D.
Otto E. Aufranc, M.D.
Robert J. Joplin, M.D.
John A. Reidy, M.D.
Eugene Record, M.D.
Carter Rowe, M.D.

Out-Patient Department

Administrative Assistant — Margaret Meenan, R.N.

EYE CLINIC

- Glaucoma Section
- Orthoptic Section
- Perimetry Room
- Refraction Room
- Tension Room

EAR, NOSE AND THROAT CLINIC

- Hearing Test Room
- Consultation: Tumor Clinic
  - Allergy Clinic
  - Plastic Clinic

Winthrop Foundation and Clinic for the Deaf

CLINICAL RESEARCH

REHABILITATION

Surgeon in Charge
Philip E. Meltzer, M.D.

Associate Surgeon
Donald K. Lewis, M.D.

Assistant Surgeon
Bernard Zonderman, M.D.

Executive Committee
D. Harold Walker, M.D., *Chairman*
LeRoy A. Schall, M.D.
Harold G. Tobey, M.D.
Moses H. Lurie, M.D.
Philip E. Meltzer, M.D.

Howe Laboratory of Ophthalmology

Director
David G. Cogan, M.D.

Staff
W. Morton Grant, M.D.
David D. Donaldson, M.D.
Bernard Zeavin, M.D.

The Boston Eye Bank — Serving New England

Executive Committee
Edwin B. Dunphy, M.D.
Henry Hixon Meyer
Mrs. Harris Fahnestock
William S. Ballard
Brendan D. Leahey, M.D.

General Director: Garrett L. Sullivan, M.D.

Executive Secretary: Miss Phyllis B. Scott

Report of the Board of Managers

The rebuilding of the Infirmary started in 1946, was completed late in 1950, and 1951 marked the first full year of operation free from the disruption of services caused by the building operations. Accordingly, it is now possible, by comparative figures for 1946 and 1951, to see how the Infirmary has fared since the end of the war.

Although $960,000 was expended during those six years to improve the hospital building and its equipment, the market value of the investments increased from $2,450,000 on January 1, 1946 to nearly $3,120,000 on January 1, 1952. The cost of operating the hospital, however, rose from $670,000 in 1946 to $1,183,000 in 1951, an increase of 76%. During the same period annual wages paid increased 80% from $362,000 to $650,000. To keep pace with this violent spiral, it was necessary to raise from time to time all charges to patients, because the larger endowment income could meet only a small portion of the higher costs. Some measure of the problem is provided by the fact that an increase of ten million dollars in the endowment would have been required to produce at 5% additional income sufficient to meet the increased cost of operations. Charges to patients produced $549,000 in 1946 and $1,023,000 in 1951.

Notwithstanding higher charges, the percentage of free care provided by the Infirmary to patients unable to pay full cost was slightly less in 1951 than in 1946. Dollarwise, however, the free care provided in 1951 amounted to $101,564.52 as against $90,095.82 in 1946.

Some years ago it became evident that the demand for patient care in the public wards was declining while the demand for semi-private and private care was rising. To meet that trend, public ward space was reduced in the rebuilding and additional facilities were provided for semi-private and private patients. The wisdom of that decision was proven in 1951, when compared with 1946, there was an increase of 33% in the use of private and semi-private rooms and a decrease of 28% in the use of the public wards. Admissions to the hospital were slightly larger in 1951 than in 1946, and the average stay dropped from 7.6 days to 6.6 days, reflecting improved techniques, drugs and antibiotics.

In 1946 the Infirmary had 227 beds. Now it has 183. The reduction in beds has made room for other facilities of great importance to the patients and has resulted in a more efficient and economical operation. Actually, more patients have been cared for in fewer beds.

RESEARCH FINANCING

Research in causes of blindness, deafness and other afflictions in which the Infirmary specializes assumed larger proportions in 1951 than ever before. This is logical and proper because of the wealth of clinical material available at the Infirmary and the presence of an expert staff intent upon the solution of the enigmas with which they are continually faced. $223,500 was expended in 1951 for research by or in association with the Infirmary. Of this amount $212,000 was provided by income from funds restricted to research and by specific grants for research from trusts, foundations, institutes, industry, government agencies and individuals, and $11,500 was provided by the Infirmary from income from its unrestricted endowments. Stated another way, the contribution by the Infirmary amounted to 26 cents for each patient day care. These figures are given to refute, so far as the infirmary is concerned, the current misconception that the high cost of hospitalization is due in large measure to the fact that costs of research are charged to patients.

For the past six years the attention of the Managers, the Administration and the Staff has been focussed upon the completion of the rebuilding program and the successful operation of the hospital during the rebuilding and since its completion. Now it is time that the objectives of the Infirmary in the care of patients, in research and in teaching should be reviewed and established for the foreseeable future.

The accomplishments of 1951 are due to the initiative, energy and cooperative spirit of all the men and women at the Infirmary. Every one of them has reason to be proud of a job well done.

Henry Hixon Meyer,
President

Treasurer's Report

In 1951 the Infirmary derived the first full year of benefit from the new additions and improvements mentioned elsewhere in these reports. The improved private and semi-private accommodations, as well as the new operating rooms, brought increased occupancy and more efficient and economical administration of the hospital. Partly as a result of these additions, the deficit of $16,799 was materially less than in the recent past few years. Although rates have necessarily been increased, the constant pressure of rising expenses has thus far made it impossible for income to meet expenditures.

The total expense of new construction and improvement since the year 1949 is shown in our balance sheet at $818,354. If other extraordinary expenses for modernization within the past five years are considered, it is apparent the total expenditures for the physical improvement of the hospital within that period have approached $1,000,000. The resulting drafts on unrestricted capital have been large.

The Infirmary enters the year 1952 better equipped than ever before to serve the public in its specialized fields. The outlook, however, is still clouded by rising costs. While the Building Program has met its immediate objective, there exists the pressing necessity of providing additional facilities for research activities.

Submitted herewith is a condensed statement of the assets and liabilities of the Infirmary as of December 31, 1951, together with a summary of the income and expenses for the year 1951, as prepared by our auditors, Messrs. Patterson, Teele & Dennis. There is also shown an analysis of the investments in securities as of December 31, 1951 as prepared by the undersigned.

HORACE W. FROST,
Treasurer

SUMMARY OF INVESTMENTS*

BONDS:	*Book Value*	*Market Value*	% *Market Value*
U.S. Government	$432,133	$410,740	13.7%
Canadian	19,172	20,500	.7%
Railroad	314,768	285,937	9.6%
Public Utility	55,431	52,187	1.7%
Industrial	45,614	45,881	1.5%
TOTAL BONDS	$858,118	$815,245	27.2%
PREFERRED STOCKS:	142,405	139,687	4.7%
COMMON STOCKS:			
Railroad	112,291	157,637	5.3%
Public Utility	252,819	320,941	10.7%
Industrial	572,044	1,021,051	34.1%
Bank, Insurance and Miscellaneous	328,101	405,197	13.6%
Investment Trust	25,000	30,675	1.0%
TOTAL COMMON STOCKS	$1,290,255	$1,935,501	64.7%
WINTHROP FUND	87,230	93,016	3.1%
WEBER FUND	10,100	9,815	.3%
TOTAL SECURITIES	$2,388,108	$2,993,264	100.0%

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* Not including Building Fund.

INCOME ACCOUNT

FOR THE PERIOD ENDED DECEMBER 31, 1951 (52 WEEKS)

Hospital Income as Per Director's Report			$1,025,706.30
Less: Hospital operating expenses as per Director's report		$1,200,104.83	
Hospital operating expenses charged directly against Permanent Funds		22,953.30	
		$1,223,058.13	
Deduct: Hospital operating expenses charged directly against Permanent Funds:			
Permanent Funds — Income	$10,862.15		
Permanent Funds — Principal	$12,091.15	22,953.30	
Net Hospital Expenses			1,200,104.83
Excess of Hospital Expenses over Income			$ 174,398.53
Income from investment securities, less income applicable to Restricted Funds not expended		$ 106,159.99	
Receipts from United Community Services, Committee of the Permanent Charity Fund, Inc., Estates of Elisha V. Ashton, G. Gorham Peters and Albert N. Blodgett (excluding contributions for special purposes)		61,337.08	
		$ 167,497.07	
Less: Treasurer's disbursements		9,878.16	157,618.91
Excess of Expenditures over Income on Income Account			$ 16,779.62

OPERATING ANALYSIS

	1951	1950
Income from Patients	$1,130,798.59	$ 961,324.52
Income from Other Sources	50,857.89	39,855.81
Total Gross Hospital Income	$1,181,656.48	$1,001,180.33
Allowances to Patients for "free care"	120,911.79	110,942.89
Further deductions for bad debts	23,603.11	16,601.36
Allowances to Blue Cross and other agencies	14,335.28	31,142.53
Total Free Service	$ 158,850.18	$ 158,686.78
Net Income	$1,022,806.30	$ 842,493.55
Salaries and Wages	$ 648,505.70	$ 562,901.16
Supplies and Expenses	332,947.17	276,439.58
Out-Patient Department Expenses	200,784.49	192,236.36
Total Operating Expenses	$1,182,237.36	$1,031,577.10
Hospital Operating Deficit	$ 159,431.06	$ 189,083.55
Extraordinary Expenses	17,867.47	2,033.32
Income from Sale of former Laundry Equipment	2,900.00	
Total Hospital Deficit	$ 174,398.53	$ 191,116.87

Balance Sheet

DECEMBER 31, 1951

ASSETS:			
Land and buildings acquired prior to January 1, 1949 (book value)		$ 491,741.99	
Additional facilities acquired since January 1, 1949 (cost)		818,354.20	$1,310,096.19
Investments, book value:			
Securities		$2,388,107.90	
Interest in parcel of real estate		1.00	2,388,108.90
Cash on hand:			
Capital:			
Building Fund	$ 7,915.29		
Other Funds	188,124.04	$ 196,039.33	
Income — Restricted		16,446.95	212,486.28
Accounts Receivable:			
Patients (less reserve)		$ 66,051.45	
Miscellaneous		3,043.84	69,095.29
Inventory of supplies, etc.			21,615.05
TOTAL ASSETS:			$4,001,401.71
FUNDS AND LIABILITIES:			
Advances from patients			$ 541.09
Accounts payable and accruals:			
Plant — additional facilities		$ 774.00	
Other		51,738.80	52,512.80
General Fund			2,251,640.52
Permanent Funds — Income Restricted			595,682.91
Building Fund — Income Restricted			7,915.29
Permanent Funds — Income Unrestricted			1,040,952.64
Special Purpose Funds			35,709.51
Unexpended Restricted Income of Permanent Funds			16,446.95
TOTAL FUNDS AND LIABILITIES			$4,001,401.71

Gifts and Bequests for 1951

The Massachusetts Eye and Ear Infirmary is grateful for all gifts, large and small. We appreciate the thoughtful friends who send glasses no longer used . . . the many contributors, from the patient who leaves a few dollars for the Patients' Fund . . . to the loyal supporters who give generously year after year.

Because of space limitations, only financial gifts of $50 and over, given during the year 1951, will be listed in this Annual Report.

American Optical Company—Research Fund for Retina Service		$ 4,300.00
Boston Eye Bank Research Fund		
Junior League of Boston	$ 1,500.00	
Mrs. Evelyn A. Cummins	750.00	
		$ 2,250.00
Boston Eye Bank Fund		
Edwin B. Dunphy, M.D.	$ 100.00	
Portsmouth N.H. Lions Club	50.00	
N.H. Association for the Blind	500.00	
Mrs. Ruth L. Darling	100.00	
Mrs. Evelyn A. Cummins	100.00	
		$ 850.00
Cancer Fund for Social Service		
American Cancer Society, Mass. Div.		$ 850.00
Christmas Fund		
Ladies Visiting Committee	$ 125.00	
Lotta Crabtree Estate	100.00	
		$ 225.00
William H. Claflin, Jr.		$ 1,000.00
Dean Foundation for Destitute Children		$ 2,200.00
Esophageal Voice Class		
American Cancer Society, Mass. Div.	$ 3,600.00	
Atlantic & Pacific Tea Company	100.00	
		$ 3,700.00
Estate of Elisha V. Ashton		$ 2,700.00
Estate of Albert N. Blodgett		$ 400.00
Estate of G. Gorham Peters		$ 2,800.00
Eye Pathology Laboratory Fund		
Ophthalmological Study Council	$ 2,875.81	
Kresge Foundation	$ 2,000.00	
		$ 4,875.81
Eye Research Fund—For Retrolental Fibroplasia Study		
Kresge Eye Institute	$ 400.00	
Children's Medical Center	535.00	
Harvard University	970.00	
Foundation for Vision	7,000.00	
Mrs. C. S. Houghton	100.00	
		$ 9,005.00
Glasses Fund		
Albert Stone, Jr.		$ 1,000.00
Dr. Robert Goodale Patients' Fund		
Maude Appleton		$ 100.00
Chandler Hovey Fund		$ 5,103.44
Godfrey M. Hyams Trust—Fund for Retina Service Research		$25,000.00
Italian Memorial Fund		
Italian-American Charitable Soc. Inc.		$ 200.00
Kresge Foundation—Fund for Retina Research		$37,700.00
Merck Institute—Research Fund for Pathology Laboratory		$ 1,200.00
Mosher Laboratory Fund		
Francis William Keeler	$ 5,000.00	
Mrs. Edna A. Shallow	1,000.00	
Samuel Cline, M.D.	100.00	
Alfred E. Smith	100.00	
		$ 6,200.00
National Society for Prevention of Blindness—Fund for Retina Research		$ 1,000.00
New Eyes for the Needy Inc.—Fund for Social Service		$ 500.00
Occupational Therapy Fund		
Ladies Visiting Committee	$ 250.00	
Brandagee Charitable Foundation	200.00	
		$ 450.00
Otosclerosis Fund		
Jacob Shore		$ 250.00
Patients' Fund		
Massachusetts Charitable Fire Society	$ 50.00	
Mrs. Taylor Black	150.00	
		$ 200.00
Permanent Charity Fund		
For Social Service	$ 750.00	
For General Funds	6,000.00	
From Nelson Weeks Fund	1,000.00	
		$ 7,750.00
Henry W. Porter Memorial Fund		
Algonquin Group	$ 50.00	
Bond Brothers, Inc.	50.00	
Mabel Marsh	50.00	
J. A. Moffit	50.00	
H. K. Porter Employees	58.00	
Mrs. Jessie L. Warren	50.00	
		$308.00
Special Social Service Fund		
Ladies Visiting Committee		$ 250.00
Dr. William Stone, Jr—Research Fund		
Perkins Institute Alumni Association	$ 65.61	
Miss Amelia Peabody	$ 1,063.35	
Mass. Council of Organizations for Blind	50.00	
		$ 1,178.96
Television for Nurses' Residence		
Henry Hixon Meyer		$ 307.81
Trustees of Devonshire Associates		$ 1,000.00
Dr. Francis Weille's Fund		
Miss Amelia Peabody		$ 7,085.64
Winthrop Research Fund		
Sarah T. Winthrop Memorial Fund		$ 1,750.00

SUMMARY OF THE BUILDING FUND

As of December 31, 1951

TOTAL SUBSCRIBED	$364,096.91
GOVERNMENT GRANT under the Hill-Burton Bill	$272,791.19
BUILDING FUND DEFICIT paid by General Funds	$236,881.33

Ladies Visiting Committee

Chairman	Mrs. Francis T. Hunter
Vice-Chairman	Mrs. Sullivan A. Sargent
Secretary	Mrs. Roy R. Wheeler
Treasurer	Mrs. Henry E. W. Cunningham

Early in the year, Mrs. McCarthy and Mrs. Winslow finished redecorating the Hooper Room in the Out-Patient Department. The addition of a number of comfortable chairs and several small tables in the same style as the furniture already in the room, and especially the hanging of colorful draperies at the windows, have changed the appearance of the room and make it a very attractive place now for the doctors to meet.

Mrs. Kazanjian was asked to take charge of providing flowers for the Front Desk and arranged to have either a box of flowers or a plant delivered every week. In the spring, we provided window boxes for the balconies, both those outside the wards and on the private floor, and Mrs. Fay had the boxes filled with flowers which bloomed all through the summer. To make the ward balconies pleasanter for the patients, our Committee also bought eight aluminum porch chairs for their use.

Over a hundred colored bed spreads were bought for the Nurses' Residence and we had their tea service repaired and replated. We gave eleven radios to the wards and two electric clocks to the rest rooms. The usual contributions were given to the Occupational Therapy and the Social Service Departments, and to the Hospital for the Thanksgiving and Christmas needs.

THE CART SHOP

The Cart Shop was begun in January and was in operation until July, reopening again in October. Two members of the Committee are on duty each Monday and Wednesday, at first near the cafeteria for the convenience of the doctors, nurses and other personnel during the lunch hours, and thereafter, the cart is taken on the floors. Although it will probably never make a large profit, the cart seems to fill a need.

The members of the Committee again this year prepared the material for making eye bandages, thus saving the Hospital considerable expense. Unfortunately, however, this activity will have to be discontinued another year as the company that has been cutting the bandages has notified us that they will no longer be able to do so.

The Annual Rummage Sale was held in April at Horticultural Hall as usual. However, partly because it becomes more difficult every year to collect material for such sales, this year we only brought in $1200, the smallest amount we have ever made.

During the summer, Mrs. Wheeler volunteered to sell articles at her house in Rockport for the benefit of the Committee. A number of members sent her articles and the sales netted about $190.

For many years, the Committee has been a member of the Massachusetts Hospital Association Auxiliaries. This year, it was voted to join the Women's Hospital Auxiliaries of the American Hospital Association, with dues of $25.

An unusually interesting meeting was held in November at the Nurses' Residence for members and their guests. After coffee had been served, Dr. Philip E. Meltzer gave a talk on the work of the Winthrop Foundation for the Deaf and showed a motion picture of the fenestration operation for the relief of deafness, as it is being developed at the Eye and Ear Infirmary.

The Committee accepted with regret the resignation of the following members: Mrs. Samuel S. Hall, Mrs. Edmund J. B. Huntoon, Mrs. Rusher Johnson and Mrs. Frederick J. Leviseur. Mrs. Ernest Sargeant was given a leave of absence until her return from Washington, and the following new members were elected: Mrs. Valentine Hollingsworth and Mrs. Steward C. Woodworth.

Margaret W. Hunter,
Chairman, Ladies Visiting Committee

LADIES VISITING COMMITTEE 1951

Mrs. Arlie V. Bock
Mrs. John Bryant
Mrs. Harry P. Cahill
Mrs. Moses F. Carr
Mrs. Nathaniel D. Clapp
Mrs. Richard C. Curtis
Mrs. Livingston Davis
Mrs. Weld Douglass
Mrs. Edwin B. Dunphy
Mrs. Henry Erhard
Mrs. John W. Farley
Mrs. Henry H. Fay
Mrs. Reginald Foster
Mrs. Trygve Gundersen
Mrs. George F. Hall
Mrs. Valentine Hollingsworth
Mrs. Harold L. Higgins
Mrs. Varaztad H. Kazanjian
Mrs. Henry Loomis
Mrs. Andrew Mason
Mrs. William W. McCarthy
Mrs. Henry D. Minot
Mrs. Henry W. Minot
Mrs. Noel Morss
Mrs. Harris P. Mosher
Mrs. Alfred Peabody
Mrs. Harold Peabody
Mrs. Henri Prunaret
Mrs. Paul C. Rasmussen
Mrs. John R. Richardson
Mrs. Arthur L. Richmond
Mrs. Edward J. R. Ropes
Mrs. Ernest Sargeant*
Mrs. LeRoy A. Schall
Mrs. Henry R. Scott
Mrs. Dwight Siscoe
Mrs. Reginald H. Smith
Mrs. Reginald H. Smithwick
Mrs. William B. Snow
Mrs. Leslie Soule
Mrs. Channing Swan
Mrs. Thomas C. Thacher, Jr.
Mrs. John E. Thayer
Mrs. Benjamin A. G. Thorndike
Mrs. Robert Truesdale
Mrs. F. H. Verhoeff
Mrs. Ralph Waterman
Mrs. Lyon Weyburn
Mrs. Roy R. Wheeler
Mrs. Gordon K. White
Mrs. Andrew Winslow, Jr.
Mrs. Stewart C. Woodworth
Mrs. John I. Wylde

Honorary Member
Miss Sally Fairchild

* On leave of absence.

Report of the Director

As it will be impossible to cover all the interesting events and trends that occurred during the past year in this brief report, I hope you will find time to read the complete story of the accomplishments of each Department which may be found on the following pages.

The results of the first full year of operation after the completion of the building program in late 1950 have fully justified the decision to increase the number of private and semi-private accommodations. Occupancy of these private beds was approximately 80% for the entire year, which, with our rapid turnover of patients, is about as full and efficient as could be expected.

The long list of patients waiting for appointments, which existed in the past, has been greatly reduced, indicating that we have reached an adequate balance. The new operating rooms also appear to be efficient and adequate. This expanded service is reflected in statistics which show that private and semi-private patients' days were more than 20% higher than last year.

The additional income from this source has placed the Infirmary in an infinitely stronger position to withstand the financial pressures which all voluntary hospitals are facing today.

However, while the number of private patients grew, visits to the Out-Patient Department decreased 5%, and the number of patients' days in the hospital wards decreased by 5.4%, continuing the downward trend which has shown marked acceleration recently. The trend is not unique with the Infirmary but is fairly general in teaching hospitals. If continued, it will bring up the serious problem of reduced teaching material for our resident training program.

The deficit for the year was $17,440.62, a disappointingly high figure largely because of the substantial cost-of-living wage increase, granted late in October and November and not anticipated in the budget. Contributing factors were also the rather large expenditures for special equipment, and the construction of rest-rooms for personnel and of a linen control room in the area formerly occupied by the laundry.

To offset these higher costs and to conform to the principal that charges should reflect costs, the following rate increases were put into effect:

May 25—Out-Patient Department clinic visits from $2.25 to $2.50

Dec. 30—Room and Board

Ward	*Semi-Private*	*Private*
$12-$14	$14-$16	$17-$22 to $19-$24

Rate adjustments were also made in operating room rates, X-ray charges and the price of glasses. It is felt that these new charges should balance the budget for the coming year, if the cost of living index stays at its present level.

The closing of the laundry in the basement and the subsequent conversion of the area to other uses in the early part of the year, was precipitated by a breakdown in the laundry machinery. As most of this equipment was so old that substantial investment would have been necessary to continue, and as space was at such a premium, the laundry was discontinued and the Hospital's work was sent out to a commercial laundry.

UTILIZATION OF SPACE

This change has proved quite satisfactory, although it did call for a considerable increase in linen supplies. However, with new and adequate space for linen storage, the control of this expensive item has been definitely improved. In addition, the area set aside for the personnel has been greatly appreciated and fills a need which had existed for some time.

Another major change has been the elimination of all patient care in the Gardner Building and the conversion of this area to other uses. Isolation patients are now in the main hospital building in cubicles where running water has been installed, and isolation techniques can be adequately carried out. The two humidifying rooms in Gardner are still available in case of emergency, but most patients who formerly used these rooms now go to the floors and are cared for in portable humidity tents developed by the Oxygen Therapy Department of the Massachusetts General Hospital.

PROGRESS IN MEDICINE

The closing of this 18 bed unit is an interesting illustration of the progress of medical science in the past three decades. Built originally as an isolation ward for infectious diseases, it was constantly filled with infant cases of ophthalmia neonatorum, diphtheria, trachoma and other infections. The use of silver nitrate at time of birth has reduced the incidence of ophthalmia neonatorum; immunization against communicable diseases and the use of antibiotics in treating many infections has greatly reduced the number and seriousness of such cases. Therefore, the need for these isolation beds has practically been eliminated.

The removal of patients from Gardner has relieved the Nursing Department of the difficult task of servicing this area, where in recent years so few patients were treated. With the continuing shortage of nurses, other efforts were made during the year to transfer to lay personnel non-nursing functions formerly done by graduate nurses. Toward this end, as described in the nursing report, additional secretarial personnel has been added to the patient areas, the authorized number of aides has been increased, and aides were used on the private floors for the first time. For this group, a full time instructor and supervisor has been added.

The Housekeeping Department has been given full responsibility for all cleaning in the patient areas, including the making of beds after the discharge of patients. It is estimated that this change alone has saved the nursing personnel 3035 hours, since last April. The time saved can now be used for better professional care of the patient. To accomplish this change, it was necessary to ask the Medical Staff to notify the floors by 3:00 P.M. the previous afternoon, listing the patients to be discharged on the following day. The time for discharge of patients was moved forward from 2:00 P.M. to 11:00 A.M. in order to give the Housekeeper time to organize the rooms for new patients. The Administration appreciated the prompt cooperation of the Staff in effecting this innovation.

Few outside our personnel realize the organization necessary to handle the rapid turnover of patients which results from the much shorter stay in a specialized hospital — six to seven days. Add to this turnover the fact that last year 6287 out of 6609 patients were admitted for surgery, and it becomes obvious that considerable pressure is placed not only on the admitting, nursing, operating room and housekeeping personnel, but also on virtually every department in order to admit and discharge patients without confusion or delay. In our 183-bed hospital, it is not uncommon to have a turnover of 50 patients a day, perhaps 25 in and 25 out. It is quite probable that the average time spent by patients in our Hospital will become even shorter in the years to come.

Several important changes in personnel were made during the year. Mrs. Eunice Wilson resigned as head of the Social Service Department after ten years of outstanding service, during which she developed the department into a position of leadership in our specialized field. Her place was taken by Miss Isabel Whiting, who came to us with years of experience from the Massachusetts General Hospital.

Mrs. Alice L. Sidley left us as Executive Housekeeper and her place was taken by Mr. Roscoe Adams. Under Mr. Adams, the department was re-organized and has now taken over the responsibility for linen control, preventive maintenance, and all housekeeping including, as has been said, the patient area.

Miss Olive Crowley resigned as Executive Secretary of the Boston Eye Bank and her place was taken by Miss Phyllis Scott, who will spend part of her time as Director of Volunteers, a position created this year. Having one person handle both responsibilities is working out most satisfactorily. Miss Scott has now taken over staffing our outpatient clinics with volunteer receptionists, who were formerly supplied to us, as to the other OPD clinics, by Mrs. Dorothy Courtney, Director of Volunteers at the Massachusetts General Hospital.

Looking toward the future, the Infirmary is still in great need of more space to carry on its extensive research and teaching programs, which are now seriously handicapped by inadequate quarters. During the last few months, plans have been developing to relieve this situation by the construction of a research building and assembly room, in the area at present occupied by the old Gardner Building. I confidently hope that the development of these plans during the coming year will result in new facilities in the not too distant future.

Francis S. Hill,
Director

Dates and Events Taken from the Minutes for 1951

January — Mr. Henry Porter, Board of Managers, died January 29.

February — Hospital laundry sent to outside concern, former laundry space used for linen control, rest rooms.

March — Parking lot at Nurses' Residence re-surfaced.

April — On-the-job training program inaugurated for Nurses' Aides, to ease nursing shortage, saves Nursing Department $4000 a year.

May — Out-Patient Department rates raised from $2.25 to $2.50 per clinic visit; Retina Foundation, for research into causes and treatment of retinal separation, became associated with the Infirmary.

June — Gardner Isolation Building closed, space utilized for Aides class room, research; Mrs. Wilson resigned as Director of the Social Service Department; Research Committees formed.

July — For the first time in the history of the hospital, the Ear, Nose and Throat clinic was closed on Saturdays in July and August, leaving the Eye Clinic the only one in the joint OPD to be open on Saturday morning.

September — The Navy contracted to finance the production of three cameras, as developed by Dr. David Donaldson in the Howe Laboratory to give three dimensional pictures.

October — 6% cost of living salary increases made to hold trained hospital personnel.

November — To keep charges realistically in line with rising costs, it was found necessary to make a $2.00 increase in both private and ward rates.

December — Preliminary plans were drawn up for the new Research Building.

Department of Ophthalmology

In common with other hospitals, we have had a falling off in the number of out-patients during 1951. There was a drop of 5% in the patient visits to the OPD, reflecting in all probability the increasing popularity of voluntary insurance plans and the tendency of many persons to seek private care. The loss of clinical teaching material, while not serious at present, emphasizes the need to utilize private cases for instruction of residents whenever possible. The only alternative, if the trend continues, would be to cut down the number of residents.

The Orthoptic Section continued to be very busy with 6,149 visits during the year — an all time high. Miss Mary Donahue, a recent graduate of our Orthoptic School, has been acting as a full-time assistant to Miss Ann E. Stromberg.

In the Refraction Room, 8,354 patients were refracted. Although this was somewhat less than last year, an increasing number — 62%, were handled by residents. During the year, several new pieces of equipment were purchased. Other statistics for the Department show that 1,349 field examinations were performed in the Perimetry Room, while in the Eye Pathology Laboratory, 582 specimens were examined, 203 of them sent from outside hospitals for our diagnosis.

The Retina Service examined as many as 488 new patients and participated in 291 operations. Several papers on retinal detachment were presented by Dr. Charles L. Schepens and his associates, at national meetings.

The Boston Eye Bank received 119 eyes during the year and reports three new hospitals have become affiliated. Dr. Garrett L. Sullivan, Director of the Eye Bank, plans to begin a research program on special corneal problems with the assistance and guidance of the Howe Laboratory staff. The program will be sponsored through the generous grant from the Junior League of Boston.

The military situation is breaking into our residency training program, one of our residents having already been called to active duty and two more expecting to go. Fortunately, we will be able to fill these vacancies with desirable young men.

Instead of the usual weekly lectures by members of the staff, we have in the past year introduced a system of symposia on various clinical subjects, given twice monthly. These conferences are carried on by several members of the Staff and are attended not only by our own residents, but also by those of the Boston City Hospital and by a number of practicing ophthalmologists.

RESEARCH FLOURISHING

Research activities are flourishing at the Infirmary. Apart from the Howe Laboratory, which has achieved national prominence for its work, there are some other research projects which are growing rapidly.

The Retina Foundation, founded in 1950 as a separate organization has now become officially a part of the Infirmary's research progam. In addition to Dr. Schepens, the Director, Dr. Endre Balazs, Dr. Marie Jakus, and Dr. Fritz Wachendorf make up the staff. Dr. Balazs is studying the mucopolysaccharides in the vitreous humor. Dr. Jakus is using the electron microscope to study the fine structures of the eye, and Dr. Wachendorf is working on better methods for examining the periphery of the retina. Headquarters for this unit are located at 30 Chambers Street, a few blocks from the Infirmary.

Dr. Parker Heath has been hard at work on a book on "Ocular Pathology," which he hopes to have published next year. Dr. Heath is also studying tumors of the lacrimal glands and the transplantation of neoplastic tissue in animal eyes. Work on the plastic cornea is being continued by Dr. William Stone, Jr., who in addition has devised an apparatus for the treatment of contracted sockets.

Dr. Merrill J. King is in charge of the Retrolental Fibroplasia study, assisted by Dr. Julian Chisholm and Dr. Leona Zacharias. This work is being carried on in cooperation with the Boston Lying-In Hospital and is being supported by the Foundation for Vision. Although research space is still a prime need, some of our research activities have been facilitated by the acquisition of one floor of Gardner Building, now closed as an isolation unit.

Edwin B. Dunphy, M.D.,
Chief of Ophthalmology

Department of Otolaryngology

THE past year has brought out two definite trends in medical education that have affected the Department of Otolaryngology. The first trend is the lack of residents and the second is the gradual decrease in the number of patients for teaching.

With the rapid demobilization following the second World War, there was a great demand thrown upon educational centers by those who took advantage of the so-called G. I. Bill. To satisfy the demand for residencies in Otolaryngology and with a sympathetic attitude toward the desire of these young doctors to further their education, many residents in Otolaryngology were approved that looked promising on paper but fell far short in actual performance.

The Korean incident, the uncertainty of the young physician regarding his military status and the increased number of approved residencies, together are causing many of the better institutions, even those connected with medical schools, to have difficulty in filling their quota of residents. This shortage of residents has especially affected the specialties of anesthesiology, radiology, pediatrics and Otolaryngology.

The Department of Otolaryngology of the Massachusetts Eye and Ear Infirmary, due to its worldwide reputation, has been able to fill its quota of residents by accepting well-qualified foreign students. Some of these have come through the W. K. Kellogg Foundation of Battle Creek, Michigan. We have representatives of Brazil, Uruguay, Mexico, Iraq, Italy and Syria. One of our future residents is a native of France, and we have the application of a young physician from Madras, India, under consideration.

RESIDENT TRAINING

In the past, a hospital was approved for resident training not only by the American College of Surgeons, but by the Council on Medical Education of the American Medical Association, and in many instances, the Specialty Board. As would be expected when there is a duplication of effort, there are many discrepancies in the approval of hospitals. This discrepancy is in the process of being corrected. During the past year, through joint effort of the American Board of Otolaryngology, the Council on Medical Education of the American Medical Association, and the American College of Surgeons, a working Conference Committee has been set up which will have the sole responsibility of the approval of residences. Only those hospitals and medical centers that can offer approved training will be accepted by this committee.

One of the decisions of the committee which will affect this hospital is that the minimum requirement for an approved residency will be three years. In the very near future, the recommendation will be made to the Board of Managers that our resident training program here be changed from 27 months to 36 months.

The second trend in medical education is the serious lack of patients for teaching purposes. Due to the large number of persons who have joined private plans for pre-paid medical care, plus the increase in those called into military service, patients are now entering hospitals as private patients who formerly were treated as service cases and were, therefore, available for teaching. In some areas, this is a very serious consideration and in some states patients are being subsidized to furnish teaching material.

Although there has been a decreased number of patients admitted to the Infirmary for service care, it has not so far seriously affected our teaching. It has been my conviction that private patients could be utilized for teaching residents, as much can be learned by being a good assistant. Perhaps the axiom that a good surgeon is first a good assistant may come to be further emphasized in our training program.

Under the guidance of Dr. Philip Mysel, who is in charge of the resident-training program, we now have a well coordinated and systematic course of instruction for residents. Dr. Mysel has developed a balanced training program that covers the whole field of Otolaryngology, as well as the related fields of medicine and surgery. He has given of himself far beyond the call of duty, and the results show when all our residents pass their specialty board examinations.

CLINICAL APPOINTMENT

The policy inaugurated one year ago of assigning Staff members to a certain day in the Out-Patient Department and another day in the operating room, has been working smoothly and is well-liked by the majority of the Staff. This arrangement, obligating the physician to a day in the out-patient clinic, makes it possible for him to plan his work so that nothing interferes with this commitment. His faithful service in the Out-Patient Department serves as an index for advancement, and is seriously considered in promotions and reappointments.

LABORATORIES AND RESEARCH

During the past summer, the Mosher Laboratory has been redesigned through the generosity of Mr. William Francis Keeler who gave the funds for the modernization. The Laboratory has been divided from one large room into a small classroom and two smaller rooms. One of these smaller rooms is used for otolaryngological research and the other for the chemical laboratory. This gives privacy to the workers and is inducive of better work, since now the room is no longer a thoroughfare or meeting place.

Dr. Meuller's collection of slides for teaching is unsurpassed and his services are greatly appreciated. Now for the first time in years, we have slides of pathological lesions that are a sound investment in education.

Dr. Moses H. Lurie is continuing his studies of the middle ear and temporal bone. He is also continuing his investigation of the effect of streptomycin on the organ of hearing. Recently, in conjunction with Dr. George Kelemen, he has been engaged in studying the effects of maternal rubella on the embryo.

Dr. Kelemen has completed his work on congenital laryngeal stridor. His work makes a contribution as one of the first studies of the histological changes in larynges of patients with this condition.

Again it is a pleasure to report on the excellent work of Miss Anita Mangiaracine as bacteriologist for the Infirmary. Her careful bacteriological tests and her sensitivity tests, which aid in the selection of the proper antibiotic and chemotherapeutic agents, have altered the course of many of the diseases which once were fatal. Her painstaking work and attention to minute details has been recognized by all the departments of our associated hospitals. Many of them use our laboratory for some of their most difficult cases.

In the department of platic surgery, the work of Dr. Edgar H. Holmes has been outstanding. His artistic ability coupled with his skill and painstaking attention to details has solved our problems of reconstructive, faciomaxillary surgery. The standards set by Dr. Varaztad Kazanjian in years past are being faithfully maintained by Dr. Holmes and his co-workers.

The work of Mrs. Mary Doehler, who rehabilitates largygectomized patients by instructing them in the development of the esophageal voice, is one of the outstanding features of our hospital. During the past year, Mrs. Doehler has had over 300 patients who have learned to talk again by her enthusiastic, optimistic attitude in encouraging them to overcome their handicap.

STAFF ACTIVITIES

The Staff of the Infirmary continues to be in demand as participants in scientific programs related to Otolaryngology, and as instructors in seminars offered by many institutions. Many of the publications and addresses will be found in the section of this report listing such activities. The devotion and loyalty of the Staff of the Infirmary has added greatly to its prestige throughout the country.

It is of concern to the Chief of the Service that although it is desirable to train young men from distant parts, looking forward 10 or 15 years from now, it is necessary to attract competent, well-trained men to take up the practice of Otolaryngology here in Boston and in other parts of New England. Never before in our history have better opportunities awaited such men as at the present time. The future of the Infirmary will depend upon attracting such qualified doctors to settle here and carry on the traditions of this institution.

LeRoy A. Schall, M.D.,
Chief of Otolaryngology

X-Ray Department

DURING the year the X-Ray Department recorded an increase of about 500 cases. This was due in part to the increase in the number of private patients, both house cases and ambulatory.

One of the highlights of the year was the special project carried out with Dr. Roman Jackson of the Department of Slavic Languages at Harvard University, and Dr. George Kelemen of our Otolaryngological Staff. The phonation of sounds by a person speaking the Russian language was tape recorded, photographed and x-rayed simultaneously. The radiographs were made in relation to the position occupied by the tongue, soft palate and uvula, and the distention of the soft palate. Careful measurements of the oral and pharyngeal cavities were made out by Dr. Gunnar Fant of the Massachusetts Institute of Technology. The work was carried on in the evening with the assistance of Mrs. Constance Wilbur and Miss Elizabeth Brady of the X-Ray Department, whose cooperation was most valuable. A report of this work will be published by the Department of Slavic Languages.

A lecture before the combined section in Radiology and Otolaryngology was given at the Connecticut State Medical Society. In September, three instruction courses are given on interpretation of the roentgen diagnosis of sinuses and mastoids before the American Roentgen Ray Society in Washington. Lectures were also given to first year students at the Harvard Medical School in "Roentgen Anatomy of the Head and Neck."

The teaching program with residents of the Infirmary and surrounding hospitals continued and was one of the most interesting aspects of the Department's work. Further stimulation and gratification came from the increasing number of visitors from foreign countries who came to the Department during the year.

RADIOGRAPHIC EXAMINATIONS

Thymus	554	Chest	1,347
Mastoids	1,060	Neck	361
Sinuses	1,923	Teeth	134
Lipiodol Injections	34	Tempero-mandibular joints	35
Petrous	90	Spine	23
Esophagus, Barium Swallow	255	Abdomen	34
Skull	159	Long Bones	2
Naso-pharynx	434	Optic Canals	87
Jaws	65	Treatments	119
Foreign Body Orbit	184	Nose	160
Miscellaneous	83		

Number of Examinations	7,143
Number of Patients	6,148
Bouginage:	
Number of Examinations	326
Number of Patients	46
TOTAL NUMBER OF EXAMINATIONS	7,469
TOTAL NUMBER OF PATIENTS	6,194

A. S. MACMILLAN, M.D.,
Roentgenologist

Comparative Statistics

HOSPITAL

	1951	1950
Ward Patients—Eye Cases	1,756	1,808
Ear, Nose and Throat Cases	1,584	1,709
Admitted to Wards	3,340	3,517
Private Patients—Eye Cases	1,780	1,199
Ear, Nose and Throat Cases	1,489	988
Private Patients	3,269	2,187
Total Patients Admitted	**6,609**	**5,704**
Operations, Ward Patients—Eye Cases	1,729	1,549
Ear, Nose and Throat	1,392	1,703
Operations, Private Patients—Eye Cases	1,859	891
Ear, Nose and Throat	1,307	1,157
Total Operations	**6,287**	**5,300**

OUT-PATIENT DEPARTMENT

New Patients—Eye Clinic	5,039	5,370
Ear, Nose and Throat Clinic	3,418	3,468
Total OPD New Patients	**8,457**	**8,838**
Visits—Eye Clinic	41,589	43,995
Ear, Nose and Throat Clinic	24,025	24,506
Total OPD Clinical Visits	**65,614**	**68,501**
Revisits—Eye Clinic	36,550	38,625
Ear, Nose and Throat Clinic	20,607	21,038
Total OPD Revisits	**57,157**	**59,663**
Operations—Eye Cases	580	720
Ear, Nose and Throat Cases	280	432
Total OPD Operations	**860**	**1,152**
Emergency Patients Admitted to Hospital	356	420
Patients Admitted To Emergency Ward	5,139	4,904

Comparative Statistics

	1951	1950
Patient Days Care—Wards	24,829	26,252
Private	18,703	11,738
TOTAL PATIENT DAYS CARE	43,532	37,990
Average Number of Patients Treated Daily—Wards	68	71
Private	51	34
TOTAL AVERAGE TREATED DAILY	119	105
Average Number of Days Patients Remain—Wards	7+	7
Private	5+	5+
Beds Available and Percent of Occupancy—Wards	115 56%	107 65%
Private	68 77%	65 74%
TOTAL BEDS AVAILABLE	183*	190
Per Capita Cost Per Day—Wards, Routine Care	$15.75	$14.38
Special Services	4.22	3.92
TOTAL COST PER DAY PER WARD PATIENT	$19.97	$18.30
Per Capita Cost Per Day—Semi-Private, Routine Care	$13.75	**
Special Service	3.94	**
TOTAL COST PER DAY PER SEMI-PRIVATE PATIENT	$17.69	**
Per Capita Cost Per Day—Private, Routine Care	$15.57	**
Special Service	4.58	**
TOTAL COST PER DAY PER PRIVATE PATIENT	$20.15	**
Condition of Ward Patients on Discharge—Died	5	9
Autopsies	40%	56%
Left Against Advice	5	9
Discharged	3,345	3,534
Ward Patients' Days Treatment—Reckoned from Discharge Payments:		
Paying Patients	11,458 47%	11,732 45%
Part Paying Patients	8,225 33%	8,630 33%
Free Patients	4,999 20%	5,537 22%
Percentage of "Free Care"—Compiled on Dollar Value, not including Blue Cross:		
House Patients	8.9%	11.2%
Out-Patients	16.1%	19.2%
TOTAL "FREE CARE"	10.7%	13.5%

*As of close of year 1951.
**Private and Semi-Private combined in 1950.

Out-Patient Department

	Eye	*Refraction*	*Total Eye*	*Total E.N.T.*
1950	35,695	9,041	44,736	21,038
1951	33,352	8,237	41,589	20,607
	2,343—6½%	804—9%	3,147—7%	431—2%

	Total Infirmary	*Total M.G.H.*	*Combined OPD*
1950	69,242	126,607	195,849
1951	65,614	118,053	183,667
	3,628—5%	8,554—7½%	12,182—6%

	Eye	*Refraction*	*Total Eye*	*E.N.T.*
1950 compared with 1949:	1½%	1½%	1½%	9%
1951 compared with 1950:	6½%	9%	7%	2%

Once again the Infirmary clinics have dropped off somewhat less than the Massachusetts General Hospital clinics, but the combined Out-Patient Department census has decreased. It is interesting to note the reverse trend in the attendance figures of the Infirmary clinics for the past year.

On May 21, it became necessary to increase the admission fee from $2.25 to $2.50 per clinic visit. The general acceptance of this rate of change by the public was interesting and encouraging.

CLINICS CLOSED SATURDAY

For the first time in the history of the OPD, the Ear, Nose and Throat Clinic, together with all the M.G.H. clinics, was closed on Saturdays during the summer months. Again the general public accepted this departure from tradition with surprising equanimity. Because of the difficulty in reassigning the Saturday Eye Clinic and because the clinic on this day furnishes the House Staff with their surgical work-load for Monday, the Eye Clinic remained open for business as usual on Saturday during the summer.

On April 5, the OPD Dispensary was decentralized. This clinic has been furnishing care to patients with minor surgical and medical conditions as well as adminstering intramuscular injection of drugs, such as diuretics and anti-biotics, to patients from all clinics for a fee of $1.00. On and after this date, therefore, the responsibility for administering intramuscular injections was placed on the clinic where the drug was prescribed, and the fee for this service was set at $1.00 provided the patient did not need to see a physician.

On April 5 also, it was decided that "conference" patients as well as post-cycloplegic patients should not be asked to pay an admission fee. Because these patients were asked to return mainly for teaching purposes, it seemed reasonable to admit them without charge but to record them as unregistered admissions rather than as "free service" patients.

On October 22, in order to shorten the waiting time for new patients, many of whom used to arrive well in advance of 8 A.M., the OPD opening hour was changed from 8 to 8:30 A.M. This plan is working out well as new patients arriving at 8:30 are processed quickly and are ready in ample time for the clinic doctors.

The Admitting Department suffered two losses in personnel during the year, the first when in August, Mrs. Evelyn Lawlor resigned after being in the group for five years. She was replaced by Miss Muriel Dow, head nurse in the Surgical Clinic.

Later in August, Miss Adeline Morrill left to assume the position of Supervisor of Information at the Post Office of the MGH. Miss Margaret D. Smith who had been doing summer relief work, stayed on to complete our staff.

Miss Margaret Manning, assistant head nurse in the Ear, Nose and Throat Clinic, was advanced to the position of head nurse in the Medical Clinic in October. Her place was filled by Miss Dora Copetti, a recent graduate of the MGH School of Nursing.

A full time Out-Patient laboratory technician was hired in April, in addition to the two part time technicians who had been carrying the excessively heavy laboratory work-load. This has resulted in speedier attention for those Infirmary patients who need the more routine laboratory tests.

During the past year, a clinic service for those suffering from alcoholism has been opened in the Out-Patient Department. Patients may be referred to this clinic from either the Infirmary clinics or the Infirmary house service. This clinic, started on June 6, was financed at the time like any other MGH clinic. Soon after its inception, however, the State Division of Alcoholism agreed to underwrite the expense of the service.

On October 15, the volunteers who have served in the eye, ear, nose and throat and refraction clinics so long and faithfully, were transferred from the Volunteer Office of the MGH and placed under the direction of Miss Phyllis B. Scott, newly appointed Director of Volunteers for the Infirmary. Under this new plan, volunteers give us the same time in the same positions, but they register at the Infirmary and their hours are credited to the Infirmary.

Due to the generosity of the Ladies' Visiting Committee, with particular credit to the sub-committee headed by Mrs. William W. McCarthy, the Hooper Room now has some very handsome draperies and sufficient chairs, tables and smoking equipment. As this room is used frequently by different groups, the new furnishings are very much appreciated.

MARGARET MEENEN, R.N.,
Administrative Assistant

Nursing Department

THE change in the teaching program for the affiliating student nurses has been one of the major changes experienced by the Department in 1951. Up to now, the student nurses had come for a two months course in eye, ear, nose and throat theory and practice, but now they come to this hospital for a four week affiliation in practical experience only, having had their classes in theory at their home school.

On January 2, the Burbank Hospital, Fitchburg, Massachusetts, sent the last two students for the two month affiliation. During the second month of their stay with us, they were much in demand, as they were our only two students during February and did an excellent job. Every effort was made to secure as many full time or part time graduate nurses as possible, to help tide us over this lean period, and with the excellent cooperation of the medical and nursing staffs, we carried on remarkably well during these trying weeks.

We anxiously awaited the 26th day of February, as on this day, 16 student nurses were admitted for the 28 day course. In the group were 10 students from the Massachusetts General Hospital, two each from Burbank and Quincy Hospitals, and one each from Melrose and St. John's Hospital in Lowell.

A new brochure for the three months' course in eye, ear, nose and throat nursing for graduate nurses was prepared and sent to interested applicants, as well as to many nursing schools. For these students, the monthly stipend was increased from $10 to $75. They also receive their board, room and laundry. Two graduate nurses, one from the Carney Hospital in Boston and one from Union Hospital, Fall River, began the three months' course of instruction at this time. Two others entered in June and one in December, all three from hospitals in Alabama.

All students completed the course and received their certificates. The total enrollment for the year was 182 (including 5 graduates) ; 101 from the MGH, 28 from Quincy, 23 from Burbank, 17 from Melrose, 12 from St. John's and one from the Boston College School of Nursing.

The shortage of graduate nurses continued to be very much in evidence, particularly when vacation time approached, necessitating relief. Advertisements were eventually tried in the Boston Sunday papers, but without success.

It was decided in June to close Gardner Ward as the number of patients had decreased to the point where it fluctuated from two to eight. The modern therapeutic treatment for ophthalmia neonatorum, trachoma, interstitial keratitis, etc. has been a great factor in lessening admission here. After the ward was closed, isolation patients were admitted elsewhere and precautions carried out as thoroughly as possible until December, when plans for individual isolation cubicles materialized.

PLASTIC HUMIDITY TENTS

With Gardner closed, portable plastic oxygen humidity tents were provided for the wards and nursery. These proved very satisfactory, particularly to special nurses called for these cases. Previously, the entire humidifying room equipment was dripping with moisture which made it necessary for the nurse to wear raincoat and rubbers and very few special nurses would accept cases under these conditions.

Much consideration was given to increasing the number of nurses' aides and to giving them organized classes under the direction of the Ward Teaching Supervisor, who also assisted with the student nurse supervision. This plan seemed to work out well and at a later date, a full time Supervisor was appointed and a fully equipped class-room set up for the aides on the second floor in Gardner Building. We still have four out of the first group of eight aides, admitted in April.

Due to the continued nursing shortage, the Administration decided to have patients discharged from the hospital by 11 A.M. A team was set up by the Housekeeping Department to check on discharges and to put the patient unit in readiness for incoming patients. This has been very helpful and greatly appreciated by all.

In June and July, as in past years, we had 12 clergymen from the Reverend Mr. Burns' "pastoral group" serving at the Infirmary. We feel very fortunate to have these men who are always most cooperative in working with our patients.

During the year, many interesting and interested visitors in the nursing field observed in our clinics and attended the nurses classes. The visitors came not only from our own country, but from places as far away as England, Denmark, Sweden and Iran.

SALARY INCREASES

All professional and lay personnel received salary increases in October.

On March 28, after 32 years of faithful and efficeint service in the Anesthesia Department, Miss Florence M. Morrissey, R.N., relinquished her responsibilities. Through the years she was an example of promptness — always first on duty in her department. She is greatly missed yet everyone is happy to know she will now enjoy her well deserved leisure. The Visiting Staff presented her with a gold wrist watch and a generous check in appreciation of her devoted service.

Mrs. Florence Hall Murray, assistant night supervisor, resigned early in July, in anticipation of the arrival of her baby in October. Her accidental death in December brought sadness to all.

It was with regret that we received Miss Eileen M. Gilmartin's resignation in December. Miss Gilmartin came to the Infirmary as assistant and night relief supervisor in 1929, following her graduation from the MGH. Thereafter she was appointed nurse in charge of the Private Floor where she served for 13 years under some of the outstanding ophthalmologists and otolaryngologists in the country. In 1942, she was appointed instructor in eye, ear, nose and throat nursing both at the Infirmary and the MGH. During these years, she gave instruction and supervision to about one thousand affiliating students and graduates and received many expressions of gratitude for her excellent teaching.

Although Miss Gilmartin enjoyed her work and her co-workers, she felt that after 22 years, a change was in order. She is now working as a clinical nurse for Sheriff Frederick R. Sullivan at the Suffolk County Jail.

Miss Katherine Hogan, MGH 1949, formerly in charge of Gardner Ward, succeeded Miss Elsie Salmi as Ward Teaching Supervisor. When Miss Gilmartin resigned, Miss Hogan took over the teaching. Before becoming a head nurse here, she had had experience in our special fields at Johns Hopkins Hospital and the New York Presbyterian Hospital. Ward teaching supervision was taken over by Miss Dorothy Ghisellini, MGH 1947, who had done an excellent job as nurse in charge of the women's ward.

Robert Whalen, our genial and cooperative houseman at the Nurses' Residence, retired this year because of ill health but not before he had won his 25 year service pin. The ten year pin was awarded to three graduate nurses, Mrs. Lois Metzler, night supervisor, Mrs. Mildred James, night nurse on the Women's ward, and Miss Teresa McQuade, evening staff nurse on the semi-private floor. A twenty year pin was won by Mrs. Viola Hurd Hult, hospital aide.

A number of comforts have been added to the Nurses' Residence during the past year. Since last March, many happy hours have been spent around the very fine television set which was generously given by Mr. Henry Hixon Meyer. New beds and mattresses were provided by the hospital, and the Ladies Visiting Committee purchased colored spreads and plastic draperies for all rooms. Also during the year, the Ladies Committee had the tea set resilvered and several of our chairs reupholstered. We are grateful for all of these things.

DOROTHY M. TARBOX, R.N.
Superintendent of Nurses

Volunteer Department

THIS year, for the first time, the Volunteer Office was given the status of a Department with a Director at its head. With this opportunity to expand the program, the Department was able to give the Infirmary more complete volunteer service and offer the volunteer closer supervision, better orientation and on-the-job training.

NEW PROJECTS

As a result of the expansion of the Volunteer Department, we added two new projects to the volunteer roster. During the summer when the volunteer program was ably handled by the Public Relations Department, a feeding program was begun for eye patients with bandaged eyes. The feeders come for two hours at noon or at night, helping first on the wards and then on the private floors. An instruction sheet outlines the routine to be followed and orientation was given on the floors by the Dietary floor staff. Both nurses and patients have pronounced the project a success.

Our second new project was the staffing of receptionist positions in the Out-Patient Department. Formerly, all OPD clinic positions were filled by the MGH Volunteer Corps, but with the "coming of age" of the Infirmary Volunteer Department, it was decided to assign the Eye and Ear, Nose and Throat clinics to the Infirmary for recruitment and orientation of volunteers. The change was effected without difficulty, procedures for the volunteers remaining approximately the same.

In February, the Nursing Department experienced an unexpected shortage of nursing personnel and appealed to the Volunteer Department for temporary help. This office contacted the Red Cross who immediately organized a corps of Nurses Aides to staff our floors in the late afternoons and evening. The Infirmary appreciates the cooperation of the Red Cross in this emergency and extends its thanks to the 26 Nurses Aides who gave 131 hours of patient care during February.

NURSERY PROGRAM

Students taking child development courses at Wheelock College continue to serve as nursery supervisors in the playroom. These students numbered 15 in the Fall, our largest single replacement. They come in pairs and are assigned one three hour period a week. Reports are sent to the college instructor on the adaptability of the student to the nursery situation.

Additional nursery supervisors came from Wellesley and Lesley and also included two young matrons and two high school students.

An orientation evening for the entire group was held for the first time in the Fall. Short talks on the Nursery Program, its procedures and importance to the children and the hospital, were given by Miss Ellen McCarthy and Miss Dorothy Hurst, head nurses in the Nursery, Miss Louise Hogan, Director of Occupational Therapy, and Mrs. Geneva Wayland, Assistant to the Director.

The Nursery Program received excellent publicity in a feature article with pictures in the *Traveler* last March under the heading "Volunteer Mothers Aid Children in Hub Hospital."

High point of the year was the Tea given April 27 at the Nurses Residence honoring all Infirmary volunteers. Special guests were 11 volunteers eligible for the American Hospital Association pin signifying completion of 100 hours service within a 12 month period. Miss Harriet Parker, Director of the Volunteer Service Bureau, presented the pins and spoke on the value of volunteer service to the community and to the individual. Carnations were given to Volunteers giving 50 hours or more to the Infirmary during the same period.

RECORD OF SERVICE

This year volunteer service figures are double those of last year. One hundred and seventy-eight volunteers rendered 5,377 hours of service in twenty-eight jobs during 1951, including ten members of the Ladies Visiting Committee who contributed 160 hours on the Gift Cart.

Unfortunately, the Volunteer Corps is still far from stable. Of our total number of volunteers, only about 30 have served more than one year at the Infirmary. A distressingly large number serve only three or four months, indicating a need for more thorough screening. As always, we relied heavily on the cooperation of the Volunteer Service Bureau for volunteers. We continued to recruit Wellesley, Lesley and Radcliffe girls through their service organizations, finding them intelligent and enthusiastic volunteers.

The Infirmary volunteers represent all age groups from all walks of life. While many are students and several come to the Infirmary after a business day, the majority are women with grown children who serve as volunteers as part of their community service.

Phyllis B. Scott,
Director of Volunteers

VOLUNTEERS WHO RECEIVED 100 HOUR PINS

1951-52

Mrs. I. E. Blumberg Clinic Receptionist	175 hrs., 20 mins.	Miss Elizabeth Rice Clinic Receptionist	100 hrs., 45 mins.
Mrs. Margaret C. Griffin Clinic Receptionist	135 hrs., 5 mins.	Miss Dora Roberts Feeder	109 hrs., 25 mins.
Mrs. Ellen Little Clinic Receptionist	106 hrs., 40 mins.	Mrs. C. H. Sprague Clinic Receptionist	122 hrs.
Mrs. Catherine Minahan Clinic Receptionist	154 hrs., 5 mins.	Mrs. Sally N. Hurst Clinic Helper	116 hrs., 10 mins.
Mrs. S. G. Nyberg Clinic Receptionist	116 hrs.	Miss Gloria Nickos Secretarial Assistant	118 hrs.
Mrs. Phyllis Nygard Nursery Supervisor	110 hrs.	Mrs. Fanny Sanborn Clinic Receptionist	423 hrs., 45 mins.

Dietary Department

Among the changes and additions experienced by the Dietary Department in 1951 were the enlarging of the dietary office space, the addition of several important pieces of equipment and an increase in the total number of meals served.

A new stainless sink was purchased for the main kitchen, to replace a wornout galvanized iron sink. Some of the other equipment used in the kitchen has been rearranged, to make a more efficient working unit and in anticipation of two stainless steel ranges and a deep freeze, to be purchased in 1952.

Early in 1951 the dietary office was enlarged by utilizing the old sewing room to provide a more private office for the dietitians. At the time of this remodeling, the two offices were repainted, making a brighter work area. Along with the renovations of the dietitians' offices, rest rooms were arranged for the use of both men and women employees by using part of the space formerly occupied by the laundry. Dietary employees share these rooms with other departments of the hospital.

To eliminate the old routine of hand drying silver for use in the cafeteria, steril-sil containers for the silver were purchased, as well as counter dispensers to hold the containers. This has improved the appearance of the tray stand in the cafeteria and now we hope to eliminate the old wooden table on which the containers stand and to replace it with a stainless steel stand in the near future.

During the summer months, a blower fan was installed in the cafeteria to help eliminate the excessive heat experienced at noon time. Also in order to make the cafeteria a more pleasant room, new screens were purchased to conceal the many pipes in the two further corners. Later during the year, new curtains were added.

CAFETERIA GROWS IN POPULARITY

During 1951 the cafeteria served 71,000 meals compared to 70,957 served in 1950. This number of meals served showed an increased income of $3,062.02 to the cafeteria from cash customers and doctors, but a decrease in credit. The cafeteria was again open for service to the Eye and Ear personnel at both Thanksgiving and Christmas. The Thanksgiving dinner was served family style while the Christmas dinner was served cafeteria style, the latter proving the most satisfactory method for the Dietary Department. The cafeteria was also used in 1951 for the supper parties of the Ophthalmological Society which are held once a month for six months during the year. Early in November, the Dietary Department again served luncheon for the Otolaryngological Society, in the Ear Clinic of the Out-Patient Department.

The number of meals served to ward and private patients was 144,372, an increase of 30,412 compared to 1950. This was due in part to the return of normal routine service to the floors after the completion of the hospital remodelling. Of the total meals served, 10,963 were special diets consisting of diabetic, low sodium, six meal bland, reduction, etc. This was an increase of 1,400 special diets over 1950. Of the total special diets served, 72 discharge diets were given, a 50% increase over the previous year.

SOLVING LABOR PROBLEMS

Among the employees, certain positions have remained filled but a rapid turnover was noted in other positions, with a growing difficulty in hiring men for certain vacancies. In January, the acting chef was promoted to full chef and has filled his position well. Due to a more stable group of women employees, it was possible to eliminate one position among the 22 floor servers formerly employed and still operate the floors as efficiently.

A special vote of thanks is again due to the Ladies Visiting Committee for making it possible to supply fruit at Thanksgiving for the patients as well as refreshments for the hospital's party at Christmas. The Occupational Therapy Department has supplied us with many original favors during the past year for which all were deeply appreciative.

The Dietary Department is looking forward to 1952 with much interest as early in the year a third dietitian will be added to the staff, thus eliminating the position of Dietary Supervisor. With this added staff member, we hope to install some new routines which should make the Department a more efficient unit.

Grace E. Lucey,
Dietitian

Social Service Department

THE first mention in a Social Service report for 1951 should be the resignation of Mrs. Eunice W. Wilson as Director, on June 1, 1951. The first pleasure of any administrator following her is to to speak, however, briefly, of the impress her stimulating personality has made on the Department, and of how steadily she held the goal of high standard in service to the patient.

During the summer interim period, before the availability of the new Director on September 24, 1951, administrative responsibility was carried by Miss Madeline Shipsey with the assistance of Mrs. Helen F. Kirwin. The careful attention to details established by Mrs. Wilson was maintained during the summer so that Department matters were handed over by Miss Shipsey in excellent order.

FOR EYE PATIENTS

Shortly before 1951, a change had been made in the previous system of keeping referrals of preschool children with retrolental fibroplasia in a separate group, for study purposes. At the beginning of the research project with these children in 1942, a single social worker had been assigned to study the social situation and to confer with the ophthalmologist, the pediatrician, psychiatrist and preschool teacher. Before the beginning of 1951, the emphasis in social work had already changed from gathering further data for the study, to giving social treatment to the patient. Also, an analysis was begun on the social information already gathered, and from a compilation of this data, Mrs. Beth Eaton Hill wrote a paper on "Social Treatment of the Young Blind Child."

The full time of one social worker is needed if we are to give these patients assistance in interpreting medical recommendations and to stimulate them towards carrying out these treatments, while at the same time making maximum use of the present findings of the study. At the present time, however, while waiting to engage another staff member for the group, referrals of these blind children are handled by the regular workers on the Eye Service. In 1951, casework was given to 91 children with retrolental fibroplasia, 26 of them new patients this year.

An additional source of concern for these preschool blind children has been the loss of Miss Pauline M. Moor, the preschool teacher who has worked under the Social Service Department and the Foundation for Vision. The warm support and untiring attention which Miss Moor gave the children and their parents, particularly in the home, contributed toward a positive adjustment to their problems. Withdrawal of Miss Moor's services will bring upsetting reactions from some parents, who will turn to the social workers in their need for reassurance.

An analysis will be made by Miss Moor in due course concerning her phase of the study. On leaving, she wrote in her report:

> "During the year, 94 children have at one period or another received intensive service from the preschool teacher. Approximately 70 others have been seen on a consultation basis only. Visits were made to 125 homes of 68 different children and to 62 various schools where retrolental fibroplasia children were enrolled. The preschool teacher had 64 interviews with parents at the time of their clinic visits and three with private patients in Dr. King's office. The statistics show additional service to 177 private patients as well as to ill clinic patients."

The glaucoma follow-up underwent some reorganization at the end of the summer by engaging an aide, rather than a secretary, who will work in closer contact with the patients in conjunction with the social worker. New patients in this follow-up service were 253; the total served was 1557; 317 were discharged, leaving an active follow-up of 1240.

Requests for glasses numbered 282, compared with 346 in 1950. Most patients who require such financial assistance, receive public funds to cover the expense of glasses. However, there are a few patients who, because of severe disabilities, are unable to comply with the Public Welfare routines and for these patients, social service funds must be used. Also social service funds are used for certain patients with low incomes, even though they are receiving Social Security employment benefits, to insure carrying out the doctor's recommendations. We assisted in financing 23 prostheses during the year.

EAR, NOSE AND THROAT SERVICE

On the Ear Service, we find that 60% of referrals include the need of a hearing aid, as well as the possibility of other problems. These patients are sent to the Boston Guild for the Hard of Hearing for hearing aid demonstrations, and in those cases where the only problem is need of financial help in paying for the aid, plans are being discussed so that they will not have to be referred back to the Infirmary again. The addition of a social worker at the Guild, makes it possible to take care of the social problems of patients needing lip reading and speech training.

In recent years there has been an increasing demand upon Social Service for hearing aids for children and special efforts are made to raise funds for this purpose. Our case workers are further trying to ascertain to what extend the child's hearing loss affects his behavior at home and at school.

On the Nose and Throat Service and the Tumor Section, where the pressing problems are those of the tumor patients, the most useful service continues to be interpretation with the family of the cancer patient. In the social worker, they have someone within the hospital setting to whom they may talk more freely about treatment reactions, prognosis, and the future ability for employment, as well as the possibilities of using community resources. Because more beds are now available, it has been less difficult to get patients into the wards for a temporary period of evaluation. This then makes it possible to arrange for terminal placement on the basis of actual diagnosis which, in turn, gives the patient a greater feeling of security.

The service of providing electrical suction apparatus to tracheotomy patients has continued and this service has benefited by having suctions provided to laryngectomy patients on a selective basis through the doctor's recommendations. We have continued to work closely with the teacher of the esophageal voice class, by making every effort to encourage patients to attend and by helping with any obstacles that would interfere with their having the benefit of this service.

WINTHROP FOUNDATION

Emphasis in the Winthrop Foundation and the Clinic for the Deaf continues to be the study of how social factors impede the total rehabilitation of the deafened adult or child. For the convenience of both the Foundation and the staff, one worker has recently been assigned full time to this service. Interpretation of the needs of the deaf child to educators in the community was continued at the teachers' meeting held in January, to which lip reading teachers and supervisors of special education were invited this year.

We have now completed bringing our community resource file up-to-date. We had excellent responses from the questionnaires sent to the state departments of education, health and rehabilitation, to societies for the hard of hearing and for crippled children and adults throughout New England and also in New York state.

Patients receiving casework service numbered 2519 for the year. On the glaucoma follow-up, 1557 patients were seen, of which 289 received casework. Thus the total number of patients served by the Department was 3787. Decrease in numbers of patients served is part of the general trend of fewer admissions.

PATIENTS SERVED

	1951	*1950*
Eye Service	1507	1665
Ear, Nose and Throat Service	1012	1257
Ear	446	602
Nose and Throat	142	160
Tumor	192	220
Winthrop Foundation	225	261
Plastic Clinic	7	14

PERSONNEL CHANGES

The following appointments were made during the year: Miss Isabel Whiting, M.S., as director; Miss Madeline Shipsey as casework supervisor; Miss

Emilie U. Farnsworth, M.S., Miss Jean Dunn, M.S., Miss Constance Crocker, M.S., as social workers; Mrs. Peggy Stamey, B.A., as aide for the glaucoma follow-up. Resignations were as follows: Mrs. Eunice W. Wilson, as Director, Mrs. Beth Eaton Hill and Mrs. Ethel H. Grant as social workers, Miss Pauline M. Moor as preschool teacher, and Miss Muriel Sanger, glaucoma secretary.

The Department also had three volunteers during the year who, as clinic assistants and as clerical workers, gave time and interest that was most helpful.

Mrs. Wilson and Miss Moor participated in the April conference of the American Foundation for the Blind, held in New York. The purpose of the meeting was to discuss the needs of the preschool blind child and the services required in relation to these needs; to set standards in education and experience of those working in such programs, and to consider the research which should be done on various phases of the problem of blindness in children. Miss Moor also served as director of the nursery group at the Summer School for Mothers of Preschool Blind Children held at the Perkins Institute.

Miss Shipsey attended the summer session at Smith College given by the School of Social Work on "Supervision." A seminar on "The Normal Child," under the auspices of the Harvard School of Public Health, was attended by Miss Mary R. Love.

During the year, five students from the Simmons College School of Social Work came to the Department for field work and three of them did theses investigating particular social and psychological problems frequently encountered by Infirmary patients. Miss Dunn and Miss Crocker later joined the staff, as noted among appointments.

FINANCIAL REPORT

Expenditures

Hearing Aids	$5,393.45
Glasses	3,297.25
Transportation	797.26
Prostheses	534.10
Foster Home Placement	514.28
Suction Machines (including rental & repairs)	351.50
Nursing Home Care	331.18
Dentures	231.00
Home Teaching Services	163.50
Camp	128.50
Institute fees for Social Workers	99.00
Literature	62.05
Bookcases	61.92
Vacation & Christmas Money for Patient	50.00
Tracheotomy Tubes	38.55
Other Medical Appliances	34.95
Brace	26.50
Reprints	15.30
Room and Board	15.00
Ambulance Fees	14.00
Miscellaneous Small Items	7.30
Dues	6.00
Total Expenses	$12,172.59

Receipts

Refunds from Agencies	$6,093.31
Refunds from Patients	5,693.25
Sale of Old Gold	112.89
Total Income	$11,899.45
Total from Social Service Funds	$273.14

New Eyes for the Needy, Inc., of Short Hills, New Jersey, in addition to being one of our many donors of glass frames, this year gave us $500 for glasses and prostheses. From the American Cancer Society, we received a gift which covered many special needs and which we used to the full. The Permanent Charity Fund again gave us a generous grant and we continue to be grateful to a long term friend who responds generously to our needs.

This year the Bay State Society for Crippled and Handicapped Children donated $298.75 for the purchase of two hearing aids, while the Weber Charities and other funds have met our appeals for finances on an individual case basis. The Ladies Visiting Committee gave us $125 twice in the year for the professional advancement of the Department. The Social Service Advisory Committee was enlarged in the course of the year, in the interests of having a broader representation from the community.

Isabel Whiting,
Director, Social Service

Occupational Therapy

THE Department was moved to larger quarters in January, to a room where it was later found possible to install a sink. This permitted the re-establishment of a shop program. Although patients able to leave the wards could take advantage of such a program, actually there were very few to benefit by the shop because of the general trend towards a short convalescent period.

Bedside treatments, therefore, continued to be the most advantageous method of contacting patients. Eye patients, referred to Occupational Therapy on routine doctors' orders, were visited previous to their operation, to explain the possibilities of hand work before their eyes were covered. Since most patients have not had experience with hand work, they need a great deal of encouragement to begin any project and we try to visit each patient once or twice a day. Patients referred to OT numbered 459 for the year, and 2866 treatments were given.

The recreation program in the Nursery was carried on entirely by the trained nursery school volunteers, under the guidance of the Public Relations Department. We cooperated in the indoctrination of these students, supplied and explained the play materials that were used, and gave the program general supervision on the floor. There were 2477 contacts made in the Nursery. In February, through a gift from the Ladies Visiting Committee, a phonograph and about 15 records were purchased, and the supply of toys was replenished with Holgate, Play-skol and other educational material.

The Book Truck was circulated weekly to the floors by volunteers until some time in September and during this time, books and magazines were supplied to 384 patients. But because even ear, nose and throat patients seem to prefer radios to reading, the demand for books dwindled until the volunteers felt they were not "busy" and the book cart was discontinued. Any future reactivation of this service will be faced with the problem of where to house the cart when not in use. Another problem of a book service, now that patients leave the hospital after only a few days, is getting books returned, especially if the cart only circulates once a week.

CURTAILED STUDENT PROGRAM

Through the course of the year, the Boston School of Occupational Therapy assigned six students to the Department, for periods of eight weeks training. However, the new hospital schedule for student nurses whereby medical lectures formerly offered bimonthly are presented only four times each year, will mean that we will not have Occupational Therapy students assigned to the Infirmary except when these medical lectures are being given. The Department will have to work out certain changes in patient service in accordance with this curtailed student program.

In November, Miss Jean Zickell, the Assistant Director, resigned to take a position at the Massachusetts General Hospital. As the position was not filled, the Department operated with only one full-time worker for the rest of the year.

The Ladies Visiting Committee continued their support and their interest in our work. Their contributions both to the OT program and to the purchase of supervised play materials were very much appreciated.

ALICE L. HOGAN, O.T.R.,
Director, Occupational Therapy

Public Relations

Resumption of campaigning for the Building Fund in the Spring and assistance with the reorganization of the Hospital's volunteer service and with the Boston Eye Bank through the summer, gave the Public Relations Department an unusually full schedule for 1951.

The United Community Service's permission to continue with carefully restricted fund raising has made it possible to add to the Building Fund during the year, in spite of the fact that this time the appeal was for improvements already accomplished and in use. The only active campaigning was in the form of two direct mail appeals on April 1 and May 24. In these mailings, we explained the need to meet the difference between the amount already raised plus the grant from the government under the Hospital Construction Act, and the total cost of remodelling.

The first mailing folder was also used as a "stuffer," included for about a month in all Infirmary out-going mail, even bills and remittances, thus reaching all stratas of our public. This piece, of course, carried no request for donations, but merely highlighted services and goals accomplished.

FUND RAISING BY STAFF

Fund raising is conducted entirely by our own forces, the Infirmary being one of the only hospitals in the area where fund raising is a regular function of the Public Relations staff — never numbering more than three workers. This of course greatly reduces the percent of fund raising expenses, but it also means that at the time of the mailings especially, many other phases of the work must be put aside.

As in previous years, a Christmas mailing to our list of about 5,000 donors thanked them for their support and reported on the expanding services their gifts have made possible. And again this year, many of our friends obviously had the Infirmary on their Christmas list and expressed their interest by generous contributions.

One of the most time-consuming and expensive accomplishments in the fund raising field this year has been the checking and re-stenciling of our entire mailing list. But since an efficient mailing list is a prime tool for any work of this kind, while nothing is worse public relations than duplicate mailings, misspelled names, or continued appeals to the deceased, such checking and correcting should be done as often as possible. Since early last summer, the Director and her Assistant have spent every available minute personally checking and correcting our list and now that it is in better shape, we have ordered a new stencil which will belong to the hospital rather than to the mailing company, as previously.

Other work with funds regularly performed by this Department is the reporting of the special purpose funds, such as the Dean Fund for Destitute Children, or the Nelson Weeks grant from the Committee of the Permanent Charity Fund, or the Italian Memorial Fund. Each year, case history reports that give dramatic evidence of the many patients helped, are sent to the donors.

Such case stories are also prepared for the Community Fund at the time of their campaign or for the Catholic Guild for the Blind for their award to an older patient who has regained workable vision through surgery, and for other such publicity. The hospital records are so full of human interest that it is never necessary to adapt or pad when we want to illustrate our services.

Some of our more spectacular cases, such as the young high school student injured last Spring in a school chemistry explosion, make the front pages of the newspapers. It is impossible in such cases to control non-hospital sources of information, but the Public Relations Office must find ways to hold the cooperation and good-will of the newspaper reporters while maintaining the doctors' standards of non-identity and cautious prognosis.

No publicity is ever given out without the consent of the patient nor any medical information without consulting the doctor. However, the patient, his family or friends, sometimes give to a newspaper contact of their own more details than this Department has felt it expedient to divulge, and then the public relations problems, especially with the other papers, are acute. Our newspaper friends cannot understand why we hide what to them are our real headlines and only want them to publicize such ubiquitous activities as fund drives.

EXTRA DUTIES

In May of this year, Miss Phyllis Scott, then Public Relations assistant, was granted leave of absence and Miss Barbara Singer took over the duties of assistant, including supervision of volunteers. When at about this same time, Miss Olive Crowley resigned as executive secretary of the Boston Eye Bank, the Public Relations Department volunteered to carry on the basic services of the Eye Bank for the summer, until such time as Miss Scott should return to become the new executive secretary. As this extra duty came during the summer vacation time, it made an unusually busy period for this office.

When Miss Scott returned in September, she was also appointed Director of Volunteers, to give her opportunity to expand the excellent volunteer program she had planned while working in the Public Relations Department. While this reallocation reduces the diversity of responsibilities of the Department, Miss Scott's able assistance in Public Relations is now missed. We have decided not to take on a third worker as usual for fund raising this year because of our present reduced quarters.

During the year, the Department has written, edited or reissued about the usual number of publications. A fully illustrated nursing folder was produced early in the year for the promotion of the new graduates courses, inaugurated when our nursing affiliation with other hospitals was reorganized. A revised edition of the folder for parents of children facing surgery, "The First Operation," was made with advice from our Social Service Department and Dr. Lucie J. Jessner of the Massachusetts General Hospital's psychiatric service for children. Most recently the folder for Esophageal Voice Class patients has been reissued, bringing the facts up to date.

INFORMATION OF ALL TYPES

While such publications are written to meet specific needs of our patients, they are also used again and again to hand to our many visitors — nurses, doctors, workers from other agencies using such services. The Public Relations Department acts as a central information bureau, answering now a letter from a local school girl asking for help in writing an article about the human eye, and next an inquiry from as far away as Hawaii, from a public health nurse asking what we are doing in research on retrolental fibroplasia (blindness in premature babies). "The First Operation" folder alone has been sent to individual parents, doctors, and other hospitals all over the country.

The Public Relations Director also takes the minutes for the Board of Managers, the Executive Committee, the House Committee, the Library Committe, and the Social Service Advisory Committee. As the policy is to make such minutes a readable chronicle of the discussions and work done by these important committees, rather than a terse "so voted," considerable time and attention is taken in transcribing them and in submitting them to the chairman of the committee for approval.

One further illustration of the diversified activities handled by the Public Relations Department was the pleasant supper and tour of the hospital attended by the secretaries to the members of the Board of Managers. Mr. Meyer, President of the Board, suggested that this group would be interested in seeing for themselves the hospital they had heard so much about and, indeed, had often served by helping with hosptial business.

VIRGINIA GEROULD,
Director, Public Relations

Housekeeping Department

THE changes that were pending in the Housekeeping Department before the present department head took over in March, and those made since that time, have made 1951 a very productive year in this branch of hospital service.

The closing of the old laundry, on May 23, has resulted in a new development — central linen control. After the old laundry equipment had been sold, the area was partitioned, cleaned, painted and refurnished. This has made possible a very efficient linen and sewing room combined, with a view-lamp for the inspection of linens for all tears, holes, etc. that might need attention. New shelves, counters, cabinets and baskets were purchased and a dutch-door installed. The dirty linen sorting room has kept our clean and dirty linen separate at all times. Now, on a standard basis, we can receive, deliver, count and pack on respective linen room shelves, all linen needed by the patient area.

The makings of certain items in the sewing room, plus mending and discarding worn equipment, is an important phase of the work, since our shorter patient stay has increased the turn-over in linens. Also newer styles and materials in patient clothing are being initiated in all areas of the hospital.

The closing of the laundry has also added two new rest rooms to our physical plant. These rooms, equipped with radio, clock, mirrors, chairs, tables, drapes, lamps and lockers, have added much to the welfare and comfort of the personnel using them.

Adjoining these rest rooms is the new location of the housekeeping office and supply room. Such an office makes it possible to hold interviews with privacy. A two line telephone, connecting the office with the linen room, allows calls to be answered at all times.

More spacious quarters for the use of our maintenance department is another acquisition worthy of mention. The preventive maintenance routine that has been in effect since September 1 has not only proved a saving in money but has given a boost to our safety program. Included in this routine are such jobs as oiling and cleaning all motors; oiling, repairing or replacing casters and wheels for beds, or medical-surgical equipment; painting and applying small fixtures as required; repairing lockers and office equipment, and in general assisting in the regular maintenance team, as needed.

CHANGES IN ROUTINE

Two important changes in routine cleaning have met with general approval. On May 1, complete responsibility for the cleaning of patient units, after the discharge of the previous patient, was transferred from the Nursing to the Housekeeping Department. This includes the entire cleaning and bed making routine after the patient has been discharged. It has been found that the labor charge for this item, under the new routine, is well below past costs.

The other change in routine cleaning has been made in the administrative area, where day cleaning has been replaced by night cleaning. This makes it possible to do all such cleaning when the area is not in use, and not only has improved the appearance of the area, but has been found to be more convenient for all concerned.

Finally, monthly meetings of the entire Department, where fire rules and regulations are reviewed, and current policy changes and new supplies and equipment are discussed, have proved helpful. A question and answer period at the close of such meetings gives an opportunity for department members to talk things over and express individual opinions.

ROSCOE C. ADAMS,
Executive Housekeeper

Personnel Department

During the year, the trend toward an employees' market was increased. Government agencies in Washington have canvassed the area with the offer of radically higher salaries and defense agencies have siphoned off desirable employees with promises of good pay. In the effort to keep valuable trained workers, employers have increased pay and salaries of their own organizations.

The result has been a relatively thin market of workers and in some categories a less desirable group to choose from. In general, however, the two associated hospitals have attracted a greater number of applicants than other hospitals in the area.

Intensive recruiting of applicants has helped to keep our supply adequate for our needs. Agencies have been circularized once a week with listings of openings; schools and colleges are contacted regularly, and jobs not filled promptly are advertised. With the tightening of the labor market, the need for advertising has increased. Approximately 8500 persons have come in to inquire about jobs. Of these, 5500 have been given applications to make out and have been screened for interviews with department heads. The sources include 46% off the street, 28% from advertising, 21% from agencies, 4% from recommendations from our employees and less than 1% from the state Free Employment Bureau.

The total number of permanent employees hired was 192, the number terminated 182, with a total turnover of 90%. This may be compared with 78% in 1950.

The annual survey of wages in the community was more extensive than usual this year. It includes data on holidays, vacations, sick leave, working hours, insurance and pension plans. Although our salaries are, in most instances, below the community average, we are in a favorable position as to holidays, sick leave and vacations.

In general, it is believed that the morale of employees in the hospital is good. The cost of living increase in October and November did much to relieve tension and stem the growing tide of restlessness.

The labor market of the future may tighten somewhat more. The present recruitment program, with watchful care, should continue to bring in applicants. The conscious effort of department heads and supervisors in dealing with employees, helps even more in safeguarding the hospital. The Personnel Office will continue to work closely with this group in arranging transfers and advising in problems.

Lois D. McCoy,
Personnel Director

The Boston Eye Bank

During the past year 119 eyes were received by the Boston Eye Bank. Of this number, 14 specimens were distributed for use in corneal transplants and the remainder for research purposes. For various reasons, such as delay in removal of the eyes within the desired time after death, or the age of the deceased, some eyes were not considered suitable for transplantation purposes. However, the use of this eye tissue for research and studies in connection with other conditions leading to blindness continues to fill an important role.

The appeal of the Eye Bank inevitably stems from interest in supplying eye tissue for transplantation of the cornea. No less important is the role of the Eye Bank in making eye tissue available for research projects in the hope that some day the cumulative knowledge gained from this research will aid in the cure and prevention of blindness. In this connection eye tissue has been supplied for study of problems related to the treatment of lime burns of the eye, separated retina, glaucoma, and the degenerative changes occurring in old age. The men engaged in these studies are most grateful for eye tissue supplied and continue to need it in their work.

HOSPITALS

During the Fall, letters were sent to all our hospital affiliations to renew their interest in the Eye Bank and remind them of our continued need for eye tissue. Emphasis was placed on the necessity for removal of eyes within an hour after death.

Three new hospital affiliations were made during 1951, bringing the total to 50 in the New England area. One of these, the Portsmouth New Hampshire Hospital, became affiliated through the active efforts and enthusiasm of the Portsmouth Lions' Club. The Club arranged for an excellent front page feature story on the Eye Bank in the *Portsmouth Herald.* This article was printed during the Lions' drive to solicit donors for the Eye Bank in that area.

The other affiliations were the Boston Lying-In Hospital and the Mercy Hospital of Springfield. It is only through the efforts and cooperation of affiliated hospitals that the Eye Bank program can function.

The Red Cross Motor Corps and Junior League Transportation Corps with the aid of the airlines and railroads, continued to provide transportation for eye tissue even under difficult circumstances. An example of the success of this cooperation occurred in June when a donor died at the Central Maine General Hospital in Lewiston, Maine. Immediately following the death at 3:00 P.M., the eye tissue was taken to the Lewiston Airport by the local Red Cross Motor Corps. Northeast Airlines flew the eyes to Logan Airport in Boston, where the Junior League Transportation Corps picked them up and took them to Winchester and the Lowell Red Cross completed the journey to St. John's Hospital in Lowell, where a transplant was performed at 9:30 P.M. the same day.

Articles on the Eye Bank were published in four hospital house organs, five denominational magazines and one college alumnae magazine. A considerable increase in requests for donor blanks was the direct result of this publicity.

JUNIOR LEAGUE

This year the program for acquainting the general membership of the Junior League on the purpose and program of the Eye Bank got underway. This group of 1600 women scattered around Metropolitan Boston are potential public relations agents for the Eye Bank in their community. Many of them serve on hospital boards and are influential in community organizations. Their interest and enthusiasm will be of help in conducting a full-scale educational program.

At the Membership Meeting of the Junior League in October, a talk by the Executive Secretary of the Eye Bank was so favorably received and elicited such a spirited response that it was decided to give a similar talk at the six area meetings of the Junior League. For this purpose, two pictorial exhibits describing the function of the Eye Bank were prepared. A permanent exhibit was set up in the Bargain Box, a League thrift shop whose proceeds benefit the Eye Bank. The other exhibit was designed for easy transportation and was used to illustrate the Eye Bank in the area meetings. Booklets and donor blanks were distributed at these meetings.

Mrs. Harris Fahnestock was appointed Junior League Chairman of the Eye Bank project in the Fall. Her initiative and encouragement were responsible for the complete cooperation of the Junior League in this educational program.

Two girls from the League provided clerical help in the office. Miss Rosamond Emerson, who has been with the Eye Bank in this capacity for three years, was joined by Mrs. Harold Cabot, Jr. This volunteer secretarial service offered by the League saves the Eye Bank added expense.

FINANCES AND RESEARCH

When the Eye Bank was founded, it was hoped it could be supported by voluntary contributions from interested persons throughout New England. For this reason, annual contributions from individuals and agencies are encouraged and renewals sought. During the past year, these annual gifts amounted to $2050. This included a $500 gift from the New Hampshire Association for the Blind. An additional gift of $750 was received from a donor for the training of young doctors in the corneal graft technique. Money received from the Junior League pays for special research and other projects.

The realization of the Eye Bank's $3000 Research

Fund through the generosity of the Junior League, made possible the Eye Bank's first full-scale research project. With the advice and counsel of Dr. Edwin B. Dunphy, Chief of the Eye Service at the Infirmary, Dr. David G. Cogan, Director of the Howe Laboratory of Ophthalmology, and Dr. Garrett L. Sullivan, Director of the Eye Bank, plans were made to utilize the fund for two separate projects. The largest grant of $2500 will be used for a basic research study on corneal metabolism. Dr. Cogan has generously offered the facilities of the Howe Laboratory for this project which will begin early in 1952. The remaining $500 is to be allocated for a practical study of instruments and techniques for the corneal transplant operation.

In June, Miss Olive M. Crowley resigned her position as Executive Secretary. This post remained vacant until September when it was filled by Miss Phyllis B. Scott, formerly Assistant in Public Relations at the Infirmary. The Eye Bank is grateful to the Public Relations Department for carrying on the Eye Bank activities during the summer months.

PHYLLIS B. SCOTT,
Executive Secretary

Howe Laboratory

THE following is a record of the past year's more obvious accomplishments. It is hoped and believed, however, that the net effect of the Howe Laboratory is considerably more than the sum of the projects herein described. It is even possible that the greatest benefit may ultimately be derived from some of the many activities that at the moment do not appear particularly newsworthy and are accordingly not here included.

RADIANT ENERGY

The studies on irradiation cataract, sponsored by the Atomic Energy Commission, have been pursued along direct and unexpectedly indirect lines. It was found that cataracts may be induced in rabbits by irradiation without manifesting other abnormality in the eye. Also the susceptibility to such cataracts was found to decline progressively throughout the life span of the animals.

A survey was made of all the material that could be collected bearing on irradiation cataracts in human beings and new conclusions were reached concerning pathogenesis of this type of cataract. This work was done by Doctors David G. Cogan and David D. Donaldson. Because of his conjoint interest in irradiation cataracts and stereophotography of the eye, Dr. Donaldson was sent to Japan under the auspices of the Atomic Energy Commission to make pictorial records representing various stages of cataract formation in atomic bomb survivors.

GLAUCOMA FINDINGS

The evidence suggesting that glaucoma, long a leading cause of blindness, is basically an alteration of the normal intra-ocular fluid dynamics, was a subject for research by Dr. W. Morton Grant. His studies on the rate of aqueous humor outflow, correlated with gonioscopic findings, have shown convincingly that the one common denominator in the various types of glaucoma is obstruction to outflow. In the "narrow angle" type, this obstruction is intermittent and dependent on the closure of the angle by the iris, whereas in the wide angle type, the obstruction is continuous and dependent on changes inherent within the filtration structures.

The method of tonography developed by Dr. Grant has been based on the automatic recording of the rate of the intra-ocular pressure and volume change during a 4-5 minute period of application of an electric tonometer on the intact eye.

A simplified technique for making these tonograpic measurements has now been found feasible when the automatic recording equipment is not available. It is expected that tonography in this simplified form will be employed principally for the diagnosis of glaucoma. For these studies Dr. Grant was awarded the first annual prize of the New England Ophthalmological Society for "the most valuable contribution made in ophthalmic science by a resident of New England during 1950."

NEURO-OPHTHALMOLOGY

The fertile interdepartmental interest in matters pertaining to the neurology of the eye and visual mechanisms has resulted in the collection of an impressive amount of anatomic and clinical material illustrating neuro-ophthalmic mechanisms and aberrations. Dr. Donaldson has prepared and photographed unique dissections of the orbit, cranium, and brain illustrating the motor and sensory systems concerned with vision. For his presentation of these stereophotographs, Dr. Donaldson was awarded Honorable Mention at the Exhibit of the American Medical Association, Section of Ophthalmology in Atlantic City, New Jersey, June 1951.

Dr. Cogan has continued his collection of clinical case studies with the tentative aim of preparing a teaching atlas if the demand is sufficient and the resources are found. The material is currently being utilized in several postgraduate courses.

Mention may be made of the unofficial supervision by Dr. Cogan of that portion of the House Officer training program, the centralization of neuro-ophthalmic study cases, and the participation in experimental neuro-ophthalmic projects.

This brief list will serve to demonstrate the wide range of interests of the Howe Laboratory personnel. While none of these studies were full-time projects, each was of real importance to the medical community.

OTHER ACTIVITIES

Dr. Donaldson supervised the construction of several cameras for the Atomic Energy Commission. These cameras are to be assigned to government agencies concerned with the cataract problem.

A specially constructed "perimetric" dark adaptometer was used by Dr. Bernard Zeavin to make exploratory studies in patients with retinitis pigmentosa, retinitis punctata albescens, and macular degeneration with the hope of obtaining a reliable index of effectivity for any therapeutic agent.

Studies of the clinical entity of Adie's pupil were made by Dr. Marvin Posner, Infirmary House Officer, and Dr. Grant. It was found that these pupils showed less hypersentivity to pilocarpine than to mecholyl.

Dr. Howard Blazar made studies on corneal vascularization which indicated that cortisone does not retard neovasculogenesis as had been hoped.

Injury to the eye by a wide variety of substances has been casually tested by Dr. Grant. The agents tested have been mostly those encountered by chance in the Clinic.

Dr. Cogan collaborated with Dr. Byron Waksmann, of the Massachusetts General Hospital, in an attempt to produce retrobulbar neuritis in rabbits by means of induced hypersensitization. Experiments aimed at obtaining an objective method of measuring visual acuity by opticokinetic response were conducted in the Howe Laboratory by Marvin Posner, M.D., House Officer of the Infirmary.

David G. Cogan, M.D.,
Director, Howe Laboratory

Lucien Howe Library

The Library was designed to serve a medical specialty — ophthalmology. Because of the foresight of its founders and the generosity of its joint sponsors, the Massachusetts Eye and Ear Infirmary and the Howe Laboratory of the Harvard Medical School, it fulfills its intended purpose admirably.

There are over 6,500 items on the Library shelves today — books, journals, and pamphlets dating from the sixteenth century to the latest issues. To judge the Library solely on these figures is a mistake, however. Small and local as it is, it can be said without exaggeration that the Howe Library is world famous.

What our Library patrons accept as commonplace and ordinary is a source of amazement to visitors from other cities and countries. During the past year visitors from France, Israel, Brazil, Ecuador, Italy, Japan, Denmark, Switzerland, and Germany spent many hours availing themselves of material not in their national medical libraries.

It is routine among libraries and investigators in the northeastern area of the United States to turn to the Howe Library for ophthalmic literature not obtainable elsewhere. During the past year, book loans were made to Yale University Biological Laboratories, Eastman Kodak Color Research Laboratories, United States State Department, Woods Hole Marine Biology Laboratory, veterans hospitals at Framingham, Fall River, Waltham and Chelsea, American Optical Company, New York Academy of Medicine, Michigan and Massachusetts Departments of Public Health, and the National Research Council. Every university, medical school and medical library in greater Boston at some time or other during the past year turned to the Library for material.

On April 15, 1951, Miss Jeanette Loessl resigned as librarian after five and a half years of service. She is at present employed as librarian with the United States Armed Forces in Europe. Her place was filled by Mr. Charles Snyder.

INNOVATIONS AND RAMIFICATIONS

In May, the Library distributed through the Medical Library Exchange, 209 books and journals to other libraries. Through the medium of the Unitarian Overseas Committe, 42 items were sent to foreign libraries and later in the year, duplicate material was sent to Japanese libraries.

During the months of July, August, and September, the Library was used after closing hours by the House Officers of the eye staff for the showing of medical motion pictures. The programs were planned by the senior House Officer and the Librarian, who also solicited the films and arranged for their showing.

Several changes have been made in the arrangement and shelving of the books, pamphlets and journals. These changes were most extensive in the smaller of the two rooms and it is hoped that this room will become a place for quiet study and research. The larger room will be more useful as a place for casual reading and writing.

Funds provided by the late Mrs. Elizabeth M. Howe were used to rebind 185 rare items of ophthalmic literature. This action makes available for research work and general distribution, a large block of books that formerly could be used only in the Library.

Gifts played a large part in the genesis of the Library and are one of the largest factors of its growth. During the past year, 12 valuable donations of books and journals were made by Staff members of the Infirmary. Each item was gratefully received and has been placed in the collection.

LIBRARY OF OTOLARYNGOLOGY

The otolaryngology collection, youngest division of the Library, has enjoyed a vigorous and rapid growth during the past year. A judicious book buying policy has resulted in a full coverage of recent ear, nose and throat literature as well as allied fields. It can be truthfully said: "If it is in print, it is in the Library."

During the year, the Librarian classified, catalogued and prepared a card index of this collection. The books were numbered and arranged on the shelves. This, plus the abundance of material, has paid immediate dividends in popularity. Circulation of the books as well as in-library reading and research seemed to increase overnight; otolaryngologists began to feel at home in the Library and every effort was made to foster this feeling. The men responsible for the formation of this library can take real and justified pride in their work and investment.

Staff members have been generous with gifts to this collection. One doctor alone donated 70 volumes of society transactions as well as a number of other items. This gesture is typical of a growing trend among ear, nose and throat men. They feel that the Library is theirs — as it surely is.

CHARLES SNYDER,
Librarian

Articles Published and Lectures Given

DEPARTMENT OF OPHTHALMOLOGY

BROCKHURST, R. J. and LION, K. S. Analysis of Ocular Movements by Means of an Electrical Method, Arch. Ophth. 46: 311-314, Sept., 1951.

Study of Ocular Movements Under Stress, Arch. Ophth. 46: 315-318, Sept., 1951.

CHANDLER, P. A. Surgery of the Lens in Infancy and Childhood, Arch. Ophth., 45: 125-138, Feb., 1951.

Practical Considerations Concerning Choice of Operation in Convergent Squint, Edward Jackson Memorial Lecture. Am. J. Ophth., vol. 34, March, 1951.

Malignant Glaucoma, Am. J. Ophth., vol. 34, July, 1951.

Vitreous Opacities. Presented at the Eastern New York State Eye, Ear, Nose and Throat Association. Albany, N. Y., March, 1951.

Diagnostic and Prognostic Implications of Vitreous Opacities. Presented at the American Ophthalmological Society. White Sulphur Springs, June, 1951.

Clinical Ophthalmology. Lectures before the combined meeting of the North and South Carolina Ophthalmological Societies. Hendersonville, N. C., Sept., 1951.

Glaucoma. Six lectures before the Ophthalmological Study Council. Portland, Me., Sept., 1951.

Glaucoma in Aphakia. Lecture given as a study course, American Academy of Ophthalmology and Otolaryngology. Chicago, Ill., Oct., 1951.

Narrow Angle Glaucoma. Mark J. Schoenberg Memorial Lecture, presented before the New York Society for Clinical Ophthalmology. N. Y., Dec., 1951. Presented as the E. J. Curran Lecture. University of Kansas School of Medicine, Kansas City, Kans., Dec., 1951.

CHISHOLM, J. F., Jr. and KINSEY, V. E. Retrolental Fibroplasia, Evaluation of Several Changes in Dietary Supplements of Premature Infants with Respect to the Incidence of the Disease, Am. J. Ophth., vol. 34, April, 1951.

DONAHUE, H. C. Congenital Ectasia of the Cornea. Presented at the New England Ophthalmological Society Meeting, March, 1951.

Ocular Fundus Manifestations of Vascular Hypertension and Toxemia of Pregnancy. Presented at St. Elizabeth's Hospital, Brighton, Mass., April, 1951.

DUNPHY, E. B. Classification of Diseases of the Cornea, Tr. Am. Acad. Ophth. 49: 382-406, March-April, 1951.

Medical Ophthalmology, Am. J. Ophth. 34: 1616-1617, Nov. 1951. (Editorial)

Common Ophthalmologic Problems of Childhood. Postgrad. Med., 10: 515-517, Dec., 1951.

External Eye Disease — Its Relation to Constitutional Disease. Presented at the Detroit Ophthalmological Society. Jan., 1951.

Some External Ocular Signs Associated with Constitutional Disease. Presented at the Section on Ophthalmology and Otolaryngology, Southern Medical Association. Dallas, Texas, Nov., 1951.

HEATH, P. Pathology of the Retinopathy of Prematurity. Am. J. Ophth. Vol. 34, Sept., 1951.

Tumors of the Iris Muscle. Tr. Am. Ophth. Soc. 49: 147-166, 1951.

Ocular Pathology. Twelve lectures before the Ophthalmological Study Council. Portland, Me., July, 1951.

Discussions in Pathology. Presented at meetings of the New England Ophthalmological Society, Boston, Mass., 1951.

JOHNSON, C. C. Ptosis: Diagnosis and Management. Glaucoma Surgery. Two lectures presented at the University of Kansas Medical Center, Postgraduate Medical Study course. Kansas City, Kans., April, 1951.

LEAHEY, B. D. A Toothed Chalazion Forcep for Marginal Chalazia. Tr. Am. Acad. Ophth. 55: 305, Jan.-Feb., 1951.

A Corneal Double Fixation Forcep. Tr. Am. Acad. Ophth. 55: 303-305, Jan.-Feb., 1951.

Bullous Keratitis Secondary to Vitreous Contact. Arch. Ophth. 46: 22-32, July, 1951.

An Adjustable Socket Stretcher for Contracted Sockets. Presented at the Annual Meeting of the Academy of Ophthalmology and Otolaryngology. Oct., 1951.

External Ocular Malignancy. A two period course given at the American Academy of Ophthalmology and Otolaryngology. Oct., 1951.

Thermal Burns of the Eye and Adnexa. Presented at the Clinical Congress of the American College of Surgeons. San Francisco, Calif., Nov., 1951.

MANCALL, I. T. Occlusion of the Central Retinal Vein. Arch. Ophth. 46: 668-676, Dec., 1951.

MONAHAN, R. H. The Human Lens. Presented at the New England Ophthalmological Society. Boston, Mass., Dec., 1951.

MOSHER, H. A. Local Use of Cortisone in Ophthalmic Diseases. Arch. Ophth. 45: 317-319, March, 1951.

SCHEPENS, C. L. Retinal Detachment and Aphakia. Arch. Ophth. 45: 1-16, Jan., 1951.

Progress in Detachment Surgery. Tr. Am. Acad. Ophth. 55: 607-614, July-Aug., 1951.

Subclinical Retinal Detachments. Read before the American Medical Association Meeting. Atlantic City, N. J., June, 1951.

Diagnostic and Prognostic Factors as Found in Preoperative Examination. Read before the American Academy of Ophthalmology and Otolaryngology. Chicago, Ill., 1951.

Diagnosis and Management of Subclinical Detachment. Presented at the New England Ophthalmological Society. Jan., 1951.

Indirect Ophthalmoscopy. Two lectures before the American Academy of Ophthalmology and Otolaryngology. Chicago, Ill., Oct., 1951.

SLOANE, A. E. Refraction Clinic. Am. J. Ophth., Vol. 34, Oct., 1951.
Analysis of Methods for Measuring Diplopia Fields. Arch. Ophth. 46: 277-310, Nov., 1951.
Massachusetts Vision Test, Guildcraft. 25: 21-32, Oct., 1951.
Collapsible Maddox Rod. Presented at the New England Ophthalmological Society. Boston, Mass., Dec., 1951.

SULLIVAN, G. L. Perimetry. An instruction course given at American Academy of Ophthalmology and Otolaryngology. Oct., 1951.

VERHOEFF, F. H. Discussion of three papers. "Occlusion of the Central Retinal Vein" by Irwin T. Mancall, M.D. "Lateral Cataract Extraction Following Filtering Operation" by Alston Callahan, M.D. "Rheumatoid Nodules of the Eye" by Everett L. Goar, M.D. and Louis S. Smith, M.D. Before the Section on Ophthalmology, American Medical Association. June, 1951.

WAITE, J. H. Retinitis Proliferans. New England Deaconess Hospital. Boston, Mass., Aug., 1951.

DEPARTMENT OF OTOLARYNGOLOGY

GOODALE, R. L. Management of Acute Frontal Sinusitis, New England J. Med., June, 1951.
Treatment of Frontal Sinusitis, Progress in Ophthalmology and Otolaryngology, June, 1951.

HOLMES, E. M. Discussion of "Congenital Atresia of Auditory Canal" by DeGraaf Woodman, M.D., before the American Medical Association Meeting. Atlantic City, N. J., May, 1951.

HOLMES, E. M., KAZANJIAN, V. H. and CONVERSE, J. Traumatic Injuries of the Face, a symposium presented before the American Academy of Ophthalmology and Otolaryngology. Chicago, Ill., Oct., 1951.

KAZANJIAN, V. H. Resection of Tumor of the Mandible and Repair of the Deformity. (Report of Case.) J. Oral. Surg. 9: 59-64, Jan., 1951.
Congenital Deformity of the Maxilla and Mandible. (Report of Case.) Plast. & Reconstruct. Surg. Vol. 7, May, 1951.
The Treatment of Mandibular Prognathism with Special Reference to Edentulous Patients, Oral Surgery, Oral Medicine, and Oral Pathology. 4: 680-688, June, 1951.
Secondary Deformities of Cleft Palates. (Collective Review.) Plast. & Reconstruct. Surg., Vol. 8, Dec., 1951.
Surgical Treatment of Mandibular Deformities. Presented at the Harvard Society of Dental Medicine. Boston, Mass., March, 1951.
Discussion of Problems in Maxillofacial Deformities. Oral Surgery Course, Graduate School of Medicine, University of Pennsylvania. Philadelphia, Pa., April, 1951.
Surgical Correction of Gross Mandibular Deformities with Emphasis on the Restoration of Function. Presented for the Plastic Surgery Staff at the United States Veterans' Hospital. Bronx, N. Y., June, 1951.
Secondary Deformities of Cleft Lip and Palate. Presented at the American Association of Plastic Surgeons. Chicago, Ill., June, 1951.
Bone Transplantation to the Mandible. Presented at the American Society of Maxillofacial Surgeons. Chicago, Ill., Sept., 1951.
Nasal Fractures. From a symposium on Facial Bone Injuries, presented before the American Academy of Ophthalmology and Otolaryngology. Chicago, Ill., Oct., 1951.

KAZANJIAN, V. H., HOLMES, E. M. and CONVERSE, J. Traumatic Injuries of the Face, a symposium. (See HOLMES.)

KELEMEN, G. Some Points of the Histopathology of Otosclerosis. Presented at the Havana Otolaryngological Society. Jan., 1951.
Microscopic Pathology of the Ear. Instruction Course given at the Pan-American Congress of Otolaryngology. Havana, Cuba, Jan., 1951.

KELEMEN, G., LURIE, M. H. and SCHALL, L. A. Embryonic Hearing Organs After Maternal Rubella, Laryngoscope. 61: 99-112, Feb., 1951. Presented as a lecture before the Eastern Section, American Laryngological, Rhinological and Otological Society. Philadelphia, Pa., Jan., 1951. Before the Pan-American Congress of Otolaryngology. Havana, Cuba, Jan., 1951.

LEWIS, D. K. Meniere's Disease, Some Observations. Presented at the New England Otological Society. Nov., 1951. Chairman of symposium: Hearing Tests in Children. Annual Convention of Speech-Hearing Association of Eastern States. March, 1951.

LINEBACK M. and SCHALL, L. A. Primary Intranasal Neuroblastoma. Ann. Otol., Rhin. & Laryng. 60: 221-229, March, 1951.

LURIE, M. H., KELEMEN, G. and SCHALL, L. A. Embryonic Hearing Organs After Maternal Rubella, Laryngoscope. 61: 99-112, Feb., 1951.

MANGIARACINE, A. B. Modern Bacteriology as an Aid to the Otolaryngologist. Ann. Otol., Rhin. & Laryng. 60: 230-234, March, 1951. (Read before the 36th Clinical Congress of the American College of Surgeons. Boston, Mass., Oct., 1950.)
Oral Moniliasis Following Antibiotic Therapy — A Warning. New England J. Med. 244: 265, 1951.

MANGIARACINE, A. and SCHALL, L. A. The Role of the Antibiotics in the Treatment of Sinusitis. (See SCHALL.)

MILLER, D. Nasopharyngeal Cancer, Laryngoscope. 61: 187-214, March, 1951. Presented at the New England Otolaryngological Society. March, 1951.

SCHALL, L. A. Cancer of the Larynx — Five Year Results, Laryngoscope. 61: 517-522, June, 1951. Presented at the American Rhinological, Otological and Laryngological Society. Atlantic City, N. J., May, 1951.
Rehabilitation of the Laryngectomized Patient. Presented at the Cancer Conference. New Hampshire Medical Society. Manchester, N. H., April, 1951.
Laryngeal Cancer. The Murphy Army Hospital. Waltham, Mass., April, 1951.

SCHALL, L. A. and LINEBACK, M. Primary Intranasal Neuroblastoma. Ann. Otol., Rhin. & Laryng. 60: 221-229, March, 1951.

SCHALL, L. A. and MANGIARACINE, A. The Role of the

Antibiotics in the Treatment of Sinusitis. Presented at the Third Pan-American Congress of Otolaryngology and Bronchosophagology. Havana, Cuba, Jan., 1951.

SCHALL, L. A., KELEMEN, G. and LURIE, M. H. Embryonic Hearing Organs After Maternal Rubella, Laryngoscope. 61: 99-112, Feb., 1951.

STERNSTEIN, H. J. Use of Antibiotics and Vasodilators in Atrophic Rhinitis. New England J. Med. 245: 165-171, Aug., 1951.

WEILLE, F. L. The Influence of Fundamental Concepts in Allergy Upon Specific Problems in Otolaryngology, Arch. Otolaryng. 54: 231-240, Sept., 1951.

Surgical Problems Involved in the Removal of Glomus-Jugulare Tumors, Laryngoscope. 61: 448-459, May, 1951.

Nose, Throat, and Sinuses in Asthma. Presented at the Post-graduate Assembly, Massachusetts Medical Society. March, 1951.

Vertigo — Panel Discussion. New England Otolaryngological Society. Nov., 1951.

ZONDERMAN, B. Rehabilitation of the Deafened Child. Presented at the Convention of the New England Speech Association. Boston, Mass. Nov., 1951.

HOWE LABORATORY OF OPHTHALMOLOGY

COGAN, D. G. Japan — after the bomb. Harvard Alumni Bulletin, Jan. 13, 1951.

Applied anatomy and physiology of the cornea. Symposium: Corneal Diseases. Tr. Am. Acad. Ophth. 329-406, March-April, 1951.

and DONALDSON, D. D. Experimental radiation cataracts. I. Cataracts in the rabbit following single x-ray exposure. Arch. Ophth. 45: 508-522, May, 1951.

Recurrent bilateral scleritis of many years' duration with unusual corneal infiltration (fat?). Arch. Ophth. 46: 341-342, Sept., 1951.

Divergence paralysis and paralysis of the near reflex associated with a malnutrition syndrome (presumably Wernicke's polioencephalitis). Arch. Ophth. 46: 436-437, Oct., 1951.

Radiant energy. Part VI, Section 4, Chapter IV in *Systemic Ophthalmology* edited by Arnold Sorsby. St. Louis, Mosby, 1951. Pp. 682-687.

Editorials.

Registry of interesting cases. Arch. Ophth. 45: 507, May, 1951.

The Atlantic City Meetings. Arch. Ophth. 46: 1-3, July, 1951.

Round table discussion on miscellaneous ophthalmic problems. Eastern Section Meeting of the Association for Research in Ophthalmology, in New York City, New York, January 27, 1951.

Cataract formation. Boston Society of Biologists, Symposium on the Effects of Irradiation on Cells, Harvard Medical School, in Boston, Massachusetts, February 21, 1951.

Lesions of the posterior corneal surface. Buffalo Eye-Bank and Research Society, Inc., in Buffalo, New York, March 8, 1951.

Lesions of the posterior corneal surface. Symposium on External Ocular Diseases, State University of Iowa, Iowa City, Iowa, March 21, 1951.

Fundus in cardiovascular disease. Graduate Course in Cardiology, Massachusetts General Hospital, in Boston, Massachusetts, May 8, 1951.

Fundus lesions in ophthalmology and external diseases of the eye. Postgraduate Course in Medicine, Massachusetts General Hospital, in Boston, Massachusetts, July 2 and 3, 1951.

Effects of radiation on the eye. Medico-Military Symposium, United States Naval Hospital, in Chelsea, Massachusetts, October 31, 1951.

DONALDSON, D. D. Radiation cataracts in experimental animals. Quarterly Meeting of Bio-Medical Program Directors, United States Atomic Energy Commission, in New York City, New York, February 21, 1951.

Relationship of radiation cataracts in humans and experimental animals. Atomic Bomb Casualty Commission Medical Meeting in Hiroshima, Japan, May 1, 1951.

GRANT, W. M. Clinical measurements of aqueous outflow. Arch. Ophth. 46: 113-131, August, 1951.

Drug intoxications and chemical injuries. Part VI, Section 4, Chapter III in *Systemic Ophthalmology* edited by Arnold Sorsby. St. Louis, Mosby, 1951. Pp. 664-681.

Clinical measurements of aqueous outflow. Section on Ophthalmology of the American Medical Association, Atlantic City, New Jersey, June 14, 1951.

Clinical tonography. American Academy of Ophthalmology and Otolaryngology in Chicago, Ill., October, 1951.

KINSEY, V. E. The chemical composition and the osmotic pressure of the aqueous humor and plasma of the rabbit. J. Gen. Physiol. 34: 389-402, Jan., 20, 1951.

SOCIAL SERVICE DEPARTMENT

ADAIR, RUTH and SHIPSEY, MADELINE. Social Aspects of Eye, Ear, Nose and Throat Diseases. Lectures to Student Nurses. Massachusetts Eye and Ear Infirmary, Boston, Mass., 1951.

HILL, BETH EATON. Social Treatment of the Young Blind Child, Social Casework. 32: 381-388, Nov., 1951.

MOOR, PAULINE M. The Preschool Blind Child. Presented at the Parents' Organization. Providence, R. I., Feb., 1951: at the Parents' Group of the Lighthouse Association. New York, N.Y., April, 1951; for the Nursery School Students. Boston Nursery Training School. Boston, Mass., May, 1951.

SHIPSEY, MADELINE. School Adjustment Problems of the Deaf Child, Guilder. 27: 4, March, 1951.

Social Problems on the Eye, Ear, Nose and Throat Services. Presented to the Student Nurses at the Lynn Hospital, Lynn, Mass., Feb., 1951.

Social Problems on the Ear Service. Presented to the third year Harvard Medical Students. Massachusetts Eye and Ear Infirmary. Boston, Mass., May, 1951.

SHIPSEY, MADELINE and BUTLER, RUTH. Manual on Supervision of Medical Social Work Students. June, 1951.

WILSON, EUNICE W. Social Aspects of Ophthalmology. Lecture to the Harvard Medical Students. Massachusetts Eye and Ear Infirmary. Boston, Mass., Feb., 1951.

Directory

MEMBERS OF INFIRMARY STAFF, ALUMNI AND RESIDENTS

Names of members of the Infirmary Staff are printed in capital letters.

Abbreviations following the name indicate to what service of the Infirmary the individual belongs:

Oph.; Ophthalmology
Otolar.; Otolaryngology
Bron.; Bronchoscopy
Esoph.; Esophagoscopy

Letters in small type preceding the abbreviations indicate the special work of the individual:

a.; assistant
an.; anesthetist
assoc.; associate
c.; chief of service
cons.; consulting
dir.; director
exec. a.; executive assistant
fel. res.; fellow in research
grad.; graduate
path.; pathologist
r.; resident
roent.; roentgenologist
s.; surgeon
s.p.o.; surgeon for plastic operations
s.t.c.; surgeon assigned to Tumor Clinic

Addresses are in Boston unless stated to be elsewhere; and are in Massachusetts when no State is indicated.

The following list is correct to the best of our knowledge and belief. If there are any inaccuracies or omissions we would be glad to have these brought to our attention.

Adams, Samuel T., Oph. 1951
1610 Pine Ave., W. Montreal, Canada

Albaugh, Clarence H., Oph. 1940
727 W. 7th., Los Angeles, Calif.

Alexander, Seeyman L., Aural, 1919
170 St. George, Toronto, Ont., Can.

ALLEN, HENRY F., a. Oph. (Oph. 1949)
200 Beacon

Allen, John H., Aural, 1904
32 Deering, Portland, Me.

ALLMAN, CHARLES H., assoc. s. Otolar.
(Otolar. 1930) 520 Commonwealth Ave.

Angelini, Hugo D., Otolar. 1951
18 Asylum St., Hartford, Conn.

Anthony, Alan R., Oph. 1936
736 Granville, Vancouver, British Columbia, Can.

Anthony, Marc, Oph. 1929
508 Old Nat'l Bank Bldg., Spokane, Wash.

Ayash, John J., Otolar. 1946
McConnell Clinic, 21 W. Central Ave., Minot, No. Dakota

Aylesworth, Frederick A., Oph. 1916
Suite 1001 Medical Arts Bldg.,
Toronto, Ontario, Can.

Bahn, Gustave C., Oph. 1948
1024-28 Maison Blanche Bldg., New Orleans, La.

Bair, Hugo L., Oph. 1932
118 Plummer Circle
Rochester, Minn.

Ballenger, John J., Otolar. 1943
806 Park Ave., Wilmette, Ill.

BARNES, HARRY A., cons. s. Otolar.

Barton, Richard T., Otolar. 1945
120 So. Lasky Drive, Beverly Hills, Calif.

Bassen, Edward J., Oph. 1928
70 E. 66th St., N. Y. C.

Bauer, Frederick, Aural 1902

BECK, PETER, r. Oph.

BEECHER, HENRY, an. MGH

BEETHAM, WILLIAM P., s. Oph.
(Oph. 1929) 108 Bay State Road

BENEDICT, EDWARD B., a.
Bron. & Esoph. MGH

Berry, Gordon, Aural 1910
36 Pleasant, Worcester

Birdsall, Clarence H., Aural 1916
(Oph. 1918) 26 Summer, Haverhill

Black, Daniel E., Otolar. 1944
184 Main, Nashua, N. H.

Blaisdell, Irl H., Otolar. 1939
1100 E. Genessee St., Syracuse, N. Y.

Bobbett, Gordon H., Otolar. 1948
125 W. Cheves St., Florence, So. Carolina

BOGAN, FREDERICK L., cons. s. Otolar.
(Aural 1908) 249 River, Milton

Boies, Lawrence R., Otolar. 1931
1937 Medical Arts Bldg., Minneapolis, Minn.

BRACONIER, HARRY E., a.s. Oph.
(Oph. 1945) 1180 Beacon

Brady, Frank W., Otolar. 1942
8 Merrimac, Lowell

Brawner, Leon E., Otolar. 1925
384 Peachtree, Atlanta, Ga.

BREED, FREDERIC B., a. Oph.
(Oph. 1950) 3 Winter St., Salem

Brewer, David W., Otolar. 1948
1100 E. Genessee St., Syracuse, N. Y.

BROCKHURST, ROBERT J., a. Oph.
(Oph. 1951) 101 Bay State Road

Brown, Lester A., Jr., Otolar. 1937
478 Peachtree, Atlanta, Ga.

Bryan, Burton D., Otolar. 1943
151 Rock, Fall River

Burke, J. Robert, Oph. 1918, Aural 1919
207 Elm, Holyoke

Cameron, Walter C., Oph. 1930
1103 Medical Arts Bldg., Tacoma, Wash.

Candray, Carlos H., Oph. 1944
San Salvador, El Salvador

Caron, Armand L., Otolar. 1927
Medical Arts Bldg., Worcester

Carroll, Frank D., Oph. 1935
635 W. 165th, N. Y. C.

CARROLL, WALTER J. E., assoc.s. Otolar.
5 Chestnut, Arlington

Carter, Leland F., Oph. 1926
613-617 David Whitney Blvd., Detroit, Mich.

Case, Paul H., Oph. 1938
418 Professional Bldg., Phoenix, Ariz.

CASTEN, VIRGIL G., s. Oph. Oph. 1931
412 Beacon

CAVANAUGH, THOMAS, a.s. Oph.
(Oph. 1940) 395 Commonwealth

Cave, Linus S., Otolar. 1927
1504 State Tower Bldg., Syracuse, N. Y.

CERRATO, CALVIN M., a.s. Otolar.
(Otolar. 1944) 15 Bay State Road

Chamberlain, Calvin B., Oph. 1944
342 Investment Bldg., Pomona, Calif.

CHANDLER, PAUL A., s. Oph. Oph. 1925
5 Bay State Road

CHISHOLM, JULIAN F., JR., a. Oph.
243 Charles St.

CLAP, EDMUND W., cons.s. Oph.
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Clarke, Samuel T., Oph. 1939
505 Medico-Dental Bldg., Reno, Nev.

CLOUGH, JOSEPH M., a. Oph.
(Otolar, 1939-Oph. 1941) 101 Bay State Road

COGAN, DAVID G., assoc.s. Oph. Oph. 1935
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Cogan, James R., Oph. 1944
444 N. Bedford Drive, Bev. Hills, Calif.

COLLINSON, A. WILLIAM, a.s. Oph.
226 Bay State Road

Converse, John M., Otolar. 1938
121 E. 60th, New York City

Cooper, Kemp G., Otolar. 1930
1516 Cook, Denver, Col.

Cordray, David P., Otolar. 1940
Dirigo Med. Clinic, Western Ave., Augusta, Me.

COVITZ, EDWARD E., a.s. Oph.
475 Commonwealth Ave.

Coyle, John A., Oph. 1931
Norwich, Vermont

Crewson, Arthur L., Otolar. 1927
132 Second, West Cornwall, Ontario, Can.

CRONIN, THOMAS P., a. Oph.
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Davidson, Herman P., Oph. 1920
30 North Michigan Ave., Chicago

DAVIDSON, MARTHA, R.N., ex. a.
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Day, Kenneth, Otolar. 1924
121 University Place, Pittsburgh, Pa.

Dean, Abbott W., Oph. 1929
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69 Chestnut, Springfield

Dowling, Joseph L., Oph. 1918
57 Jackson, Providence, R. I.

DROOKER, J. CHARLES, assoc. s. Otolar.
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Drury, Dana W., Aural 1906
483 Beacon

Duclos, Gaston N., Otolar. 1943; Oph. 1945
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DUNPHY, EDWIN B., c. Oph. Oph. 1923
243 Charles

EASTON, MAHLON T., a.s. Oph.
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ERNLUND, CARL H., s.t.c. Otolar. 1927
5 Bay State Road

EVANS, MAURICE G., s. Otolar.
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Evans, William H., Oph. 1924
510 Dollar Bank Bldg., Youngstown, Ohio

Farrell, James I., Oph. 1932
308 Kempf Bldg., Utica, New York

Filmer, George A., Oph. 1939
520 Metropolitan Bldg., Denver, Colo.

Fisher, Stanwood E., Aural 1909
338 Spring, Portland, Me.

Fleming, Calvin, fel. Oph. Path.
243 Charles

Floyd, Paul E., Oph. 1946
2 Middle St., Farmington, Me.

Foote, Charles M., Oph. 1940
412 North Hastings Ave., Hastings, Neb.

Frackelton, Ralph J., Otolar. 1933
14800 Madison Ave., Cleveland, Ohio

Franklin, C. Ray, Oph. 1931
10 E. 90th, New York City

FRAZEE, JOHN R., assoc. s. Otolar.
(Otolar. 1934) 1180 Beacon St.

FRED, GUSTAVE, cons. s. Otolar.
(Otolar. 1925) 520 Beacon

Fultz, William E., Oph. 1927
45 Kaye, Halifax, N. S., Can.

Gabriels, Joseph A. C., Oph. 1921
435 State, Albany, N. Y.

GARLAND, FREDERICK E., cons. s. Otolar.
483 Beacon

Gaudreau, Honore E., Oph. 1930
293 Bridge, Springfield

Gaus, Louis, Oph. 1921
Ticonderoga, N. Y.

Germain, Harry H., Oph. 1899
479 Commonwealth Ave.

Gibson, Arthur C., Aural 1921
516 Sutter, San Francisco, Calif.

Gifford, Harold, Jr., Oph. 1934
1620 Medical Arts Bldg., Omaha, Neb.

Gilbert, John J., Oph. 1917; Aural 1920
209 Angell, Providence, R. I.

GILLER, HERBERT, r. Oph.

Gillespie, Elmer H., Otolar. 1932

GINSBERG, JOSEPH, r. Oph.

Goduti, Richard J., Oph. 1946
704 Congress, Portland, Me.

Goldcamp, Richard R., Otolar. 1948
364 Fair Green Ave., Youngstown, Ohio

Goldman, A. Milton, Oph. 1924
Rockville Centre, N. Y.

GOODALE, JOSEPH L., cons. s. Otolar.
Ipswich

GOODALE, ROBERT L., s. Otolar.
(Otolar. 1926) 330 Dartmouth

GOODALL, EDWIN B., a. Oph. (Oph. 1952)
99 Bay State Road

Goodell, William, Aural 1906
216 Flower Drive, Harbor Acres
Sarasota, Fla.

GRANT, W. MORTON, a. Oph.
Howe Lab. 243 Charles

Gray, Gerald H., Otolar. 1929
420 Mountain Ave., Piedmont, Calif.

GROSSMAN, HERMAN P., a.s. Oph.
(Oph. 1934) 210 Angell, Providence, R. I.

Guimaraes, Joao C., Otolar. 1946
Rua David Campista 67, Botafogo, Rio, Brazil

GUNDERSEN, TRYGVE, s. Oph. Oph. 1930
101 Bay State Road

Hacking, Raymond F., Oph. 1927
105 Waterman, Providence, R. I.

HAIRE, PAUL G., a.s. Oph.
6 Pleasant, Malden

HAKIM, ARCADIUS, s. Otolar.

HALEY, WARREN D., a. Oph. Oph. 1950
78 Church St., Winchester
1180 Beacon St.

Halton, Edward J., Otolar. 1942
56 Sutton, Holyoke

HAPP, LINLEY C., a. Oph.
(Otolar. 1931 — Oph. 1943)
170 Waterman, Providence, R. I.

HEATH, PARKER, dir. Oph. Path. Lab.
243 Charles St.

Heffernan, David A., Oph. 1904
270 Commonwealth Ave.

Heine, Lyman H., Otolar. 1927
1535 N. Broad, Freemont, Nebr.

Heinicke, Horst J., Otolar. 1948
116 N. Buffalo St., Ithaca, N. Y.

Hennessey, William W., Aural 1908
33 Essex, Salem

HERMAN, EDWARDS, con. s. Otolar.
Lincoln

HILL, FRANCIS S., dir. M. E. & E. I.

Hill, Frederick T., Aural 1916
111 Main, Waterville, Me.

HILL, JOHN M., a. Oph.
108 Bay State Road

Ho, Albert K. T., Otolar. 1949
Central Med. Building, Beretania & Kalakaua
Honolulu, T. H.

Hobart, Carl, Oph. 1922
3601 A Gravois Ave., St. Louis, Mo.

Hollabaugh, Charles F., Oph. 1932
1915 Church St., Nashville, Tenn.

HOLMES, EDGAR M., s.p.o. Otolar.
(Otolar. 1934) 330 Dartmouth

Holt, Lawrence B., Oph. 1948
208-209 Reynolds Bldg.,
Winston-Salem, N. Carolina

Hoople, Gordon D., Otolar. 1926
1100 E. Genessee St., Syracuse, N. Y.

Houston, G. Gilbert, Otolar. 1938
10 West, Charlottetown, P.E.I., Can.

HUTCHINSON, RUTH M., R.N. ex. a.
M. E. & E. I.

Ireland, Percy E., Otolar.
170 St. George, Toronto, Ontario, Canada

Irgens, Edwin R., Otolar. 1938
Benton Harbor, Michigan

Irvine, A. Ray, Jr., Oph. 1947
9730 Wilshire Blvd., Beverly Hills, Calif.

Irvine, S. Rodman, Oph. 1935
9730 Wilshire Blvd., Beverly Hills, Calif.

Irvine, Wendell C., Oph. 1941
700 Roosevelt Bldg., Los Angeles, Calif.

Jesberg, Norman, Otolar. 1947
Eye & Ear Hospital
500 So. Lucas Ave., Los Angeles, Calif.

Jewett, Everett P., Oph. 1945
21 West, Worcester

JOHNSON, CARL C., a.s. Oph. Oph. 1942
5 Bay State Road

JOHNSON, CHARLES I., s. Otolar.
(Otolar. 1929) 403 Commonwealth Ave.

JOHNSON, DAVID S., r. Oph.

Johnson, Lorand V., Oph. 1937
2065 Adelbert Road, Cleveland, Ohio

Jones, Edward E., Otolar. 1928
141 W. Elm, Brockton

JOSEPH, ALFRED T., a. Otolar.
475 Commonwealth

Judd, Delbert K., Otolar. 1934
423 Arcade Bldg., Kankakee, Ill.

Kant, Alfred, Oph. 1948
620 Woolworth Bldg., Watertown, N. Y.

KAZANJIAN, KENNETH, a. Otolar.
475 Commonwealth Ave.

KAZANJIAN, VARAZTAD H., con.s.p.o.
475 Commonwealth Ave.

Kearny, Richard A., Aural & Lar. 1921
2311 Connecticut Ave., Washington, D. C.

KELEMEN, GEORGE, a.s., Otolar.
20 Gloucester St.

KELLEY, VINCENT J., s. Otolar.
520 Commonwealth Ave.

Kennealley, Elmer V., Oph. 1952
704 Congress St., Portland, Me.

Kennedy, Michael F., Oph. 1927
805 Columbia Medical Bldg., Washington, D. C.

KENT, CHARLES, a.s. Otolar.
270 Commonwealth Ave.

Kerst, J. Arthur, Oph. 1934
55 East Washington, Chicago, Ill.

King, David G., Otolar. 1951
605 Commonwealth Ave.

KING, MERRILL J., s. Oph. (Oph. 1932)
1180 Beacon

Kos, Clair M., Otolar. 1941
University Hospital, Iowa City, Iowa

Lane, Charles S., Otolar. 1949
Merchants Nat'l Bank Bldg.,
Fort Smith, Arkansas

Langworthy, Henry G., Aural 1907
394 West 10th St., Dubuque, Iowa

LaPierre, Warren W., Oph. 1948
32 Clinton Ave., Norwichtown, Conn.

Lavoie, Roland, Jr., Otolar. 1950
3 Claire Fontaine St.,
Quebec City, Quebec, Canada

LAWLOR, EDWARD F., a.s. Otolar.
(Otolar. 1941) 67 Vernon St., Waltham

LEAHEY, BRENDAN D., assoc. s. Oph.
(Oph. 1933) 9 Central, Lowell

LEAVELLE, ROBERT B., r. Oph.

Leconte, Charles M., Otolar. 1947
Rue Royale, Cap-Haitien, Haiti

Lemoine, Albert N., Oph. 1923
411 Alameda Road, Kansas City, Mo.

Lemoine, Albert N., Jr., Oph. 1945
411 Alameda Road, Kansas City, Mo.

LENTINE, JOSEPH, a.s. Otolar.
(Otolar. 1935) 395 Commonwealth Ave.

Levitt, Jesse M., Oph. 1933
515 Ocean Ave., Brooklyn, N. Y.

LEWIS, DONALD K., a.s. Otolar.
(Otolar. 1943) 15 Dix St., Winchester

LIEBMAN, SUMNER D., a.s. Oph.
(Oph. 1943) 115 Bay State Road

Liebman, William, Oph. 1911
115 Bay State Road

Lilly, John S., Otolar. 1951
82 East 5th St., London, Ohio

LINCOFF, WILLIAM, r., Oph.

Lineback, Merrill I., Otolar. 1952
113 14th St., N.E.
Atlanta, Georgia

Lodge, Edmund A., Otolar. 1924
Pleasant Street, Gloucester

LO-PRESTI, JOSEPH J., a. Oph.
341/2 Beacon

Loring, Robert G., Oph. 1900, Retired

Lothrop, Oliver A., Aural 1911
101 Beacon

Lougee, John L., Aural 1909
475 Commonwealth Ave.

Lovely, David K., Otolar. 1946
73 Deering, Portland, Me.

LOVESEY, BURTON S., assoc. s. Otolar.
(Otolar. 1935) 76 Bay State Road

LURIE, MOSES H., s. Otolar.
483 Beacon

Lynch, Mercer G., Otolar. 1936
1567 Exposition Blvd., New Orleans, La.

MacDonald, Alexander E., Oph. 1923
421 Med. Arts Bldg., Toronto, Ont., Can.

MacDonald, Donald H., Otolar. 1930

Machamer, R. Wenner, Otolar. 1945
1027 Rose Bldg., Cleveland, Ohio

MacKenzie, Roland C., Oph. 1911.
30 Grant, Waltham

MacLAUGHLIN, CHARLES H., a. Oph.
(Oph. 1947) 834 Broadway, Everett

MacMILLAN, ALEXANDER S., roent.
483 Beacon

MacMillan, Andrew L., Jr., Aural 1912
46 Pleasant St., Concord, N. H.

Macnie, John P., Oph. 1929
635 W. 165th, New York City

MANCALL, IRWIN T., a. Oph. Oph. 1952
750 Main St., Hartford, Conn.

Mansur, Leon Wallace, Oph. 1898 Retired
Valley Center, Calif.

MARTIN, S. FORREST, a.s. Oph. Oph. 1938
101 Bay State Road

MARTINEZ, DANIEL E. M., r. Otolar.

Mattis, Robert Dean, Oph. 1942
4474 Westminster Place, St. Louis, Mo.

McCabe, Frank J., Oph. 1916
204 Angell, Providence, R. I.

McCall, Robert E., Otolar. 1938
236 S. Main, Marion, N. C.

McClintock, Walter L., Otolar. 1938
1245 Hancock, Quincy

McENEANY, JOSEPH P., a. Otolar.
(Otolar. 1947) 301 Essex, Lawrence

McGuigan, G. Edmund, Oph. 1924
116 W. Market, York, Pa.

McIntire, Frederic J., Oph. 1910
63 North Common, Lynn

McKEIGUE, JOHN E., a Otolar.
(Otolar. 1949) 520 Commonwealth Ave.

McKenzie, Rodney J., Otolar.
480 Doctors' Bldg., 19 Garfield Pl., Cinn., Ohio

McLeod, Angus M., Otolar. 1932
Medical Arts Bldg., Toronto, Ontario, Canada

McLeod, John, Oph. 1930
636 Argyle Bldg., Kansas City, Mo.

Meek, Raymond E., Oph. 1926
729 Park Ave., New York City

MELTZER, PHILIP E., s. Otolar. Aural 1919
20 Charlesgate West

Merritt, Robert E., Oph. 1920 Retired
Valley Center, Calif.

Mertins, Paul S., Otolar. 1936
32 Clayton St., Montgomery, Ala.

Messenger, Harry K., Oph. 1934
313 Commonwealth Ave.

Meyer, Monto F., Oph. 1919
904 Canal Bank Bldg., New Orleans, La.

Miles, Nathan E., Oph. 1937
1031 S. 21st St., Birmingham, Ala.

MILLER, DANIEL, a.s. Otolar.
(Otolar. 1943) 403 Commonwealth Ave.

Mills, Lloyd, Jr., Oph. 1947
910 Westchester Pl., Los Angeles, Calif.

Moore, Donald E., Oph. 1937
417 Medical Arts Bldg., Syracuse, N. Y.

Moore, Edward E., Oph. 1944

Moore, Fontaine B., Aural 1914

Moore, James A., Otolar. 1940
525 E. 68th, New York City

Moorman, John D., Oph. 1939
Times Bldg., Huntsville, Ala.

MORRISSEY, ARTHUR M., a. Oph.
185 High, Medford

MOSHER, HARRIS P., cons. s. Otolar.
127 Front, Marblehead

MOSHER, HENRY A., a.s. Oph.
(Oph. 1941) 71 Bay State Road

Moteley, Frederick E., Otolar. 1925
Charlotte Eye and Ear Hospital
Charlotte, North Carolina

Moulton, Everett C., Jr., Oph. 1948
Merchants National Bank Bldg.
Fort Smith, Arkansas

MUELLER, WERNER, dir. Mosher Lab.
(Otolar. 1933) 243 Charles

Murphy, William E., Otolar. 1933
Slater Bldg., Worcester

Myers, Roscoe W., Oph. 1927
36 Pleasant, Worcester

Myers, Stanley A., Otolar. 1937
2218 Market St., Youngstown, Ohio

MYSEL, PHILIP, cons. s. Otolar.
483 Beacon

Nachlas, Nathan E., Otolar. 1951
Rochester Court Apts.
Baltimore, Md.

Navas, Luis, Otolar. 1950
Apartado No. 376
Managua, Nicaragua

Nicholson, Harry M., Aural 1913
515 Medical Arts Bldg.
Hamilton, Ontario, Can.

O'Connell, John D., Oph. 1943
50 Farmington Ave., Hartford, Conn.

O'Connor, Michael James, Oph. 1946
Valley National Bank Bldg., Tucson, Ariz.

O'Connor, Michael John, Aural & Lar. 1923
105 Waterman, Providence, R. I.

OFFENBACH, BERTHA, a. Oph.
270 Commonwealth Ave.

Ogden, Frederic W., Otolar. 1942

OKAMURA, ICHIRO, r. Oph.

Olds, Bomar A., Otolar. 1929
26 Linden Ave., N. E., Atlanta, Ga.

OLSEN, HENRIETTA I., R.N. exec.a.
M.E. & E.I.

Parker, Harry C., Oph. 1902

PERONE, PIERO, r. Otolar.

PETERSON, WALBORG L., R.N. exec.a.
M.E. & E.I.

PFISTER, RAYMOND L., r. Otolar.

PIPPITT, RICHARD B., a. Oph.
(Oph. 1949) 99 Bay State Road

POIRIER, GEORGE H., cons. s. Otolar.
60 Bay State Road

POLLEN, ABRAHAM, a.s. Oph.
(Oph. 1944) 636 Beacon

Pollock, Frederic J., Otolar. 1935

Poppen, Mayo J., Oph. 1948
6356½ Van Nuys Blvd.
Van Nuys, Calif.

Posner, Marvin, Oph. 1952
371 State St., Albany, N. Y.

Price, F. Raymond, Oph. 1936
118 Rutledge Ave., Charleston, S. C.

Provost, Adolphie J., Otolar. 1927
66 Middle St., Manchester, N. H.

Prudhon, Charles A., Otolar. 1930
168 Sterling, Watertown, N. Y.

Quevedo, A. Arturo, Oph. 1933
4a Ave. Sur 19, Guatemala City
Guatemala, C. A.

Quedevo, Julio, Otolar. 1941
15 C.O. 5, Guatemala City, Guatemala, C. A.

QUINCY, JOSIAH E., cons. s. Otolar.
(Otolar. 1926) 270 Commonwealth Ave.

Rambo, J. H. Tom, Otolar. 1948
119 E. 74th Street, N. Y. C.

Raynes, Alphonse F., Oph. 1923
16 Market Sq., Portsmouth, N. H.

Reagan, Daniel J., Oph. 1943 — Otolar. 1944
507 Main, Worcester

REED, GEORGE F., r. Otolar.

REGAN, CHARLES D. J., r. Oph.

Rice, Theodore A., Oph. 1942
390 Main, Worcester

RICE, EARLE W., r. Otolar.

RICHARDS, LYMAN G., s. Otolar.
(Otolar. 1942) 1101 Beacon, Brookline

RICHARDSON, JOHN R., assoc. s. Otolar.
(Otolar. 1935) 403 Commonwealth Ave.

RIEMER HUGO B.C., cons. s. Oph.
62 Winter St., Norwood

RIEMER, KARL, a.s. Oph. Oph. 1943
403 Commonwealth Ave.

ROOPENIAN, ARAM, a.s., Otolar.
(Otolar. 1944) 475 Commonwealth Ave.

Rothwell, Stephen C., Otolar. 1925
100 Eighth, New Bedford

RUBEN, MAURICE, a. Otolar.
311 Commonwealth Ave.

RUGGLES, RALPH H., cons. s. Oph.
(Oph. 1920) 394 Marlborough

RUNGE, PAUL M., a. Oph.
140 Marlborough

SACHS, BENJAMIN, s. Oph.
(Oph. 1925) 636 Beacon

SA'EED, YUNIS M., r. Otolar.

Sainsbury, Augustus W., Otolar. 1943
42 N. Main, Canandaigua, N. Y.

Sams, James M., Otolar. 1949
Jones Eye, Ear, Nose and Throat Hospital
Johnson City, Tennessee

Sargent, Francis B., Aural & Lar. 1923
124 Waterman, Providence, R. I.

Savage, Ross E., Oph. 1910
Gloucester

Scarney, Herman D., Oph. 1928
573 Fisher Bldg., Detroit, Mich.

SCHALL, LeROY A., c. Otolar.
243 Charles

SCHEPENS, CHARLES L., a. Oph.
243 Charles St.

Schnebly, J. Thomas, Oph. 1936
900 17th N.W., Washington, D. C.

SCOTT, DAVID H., a. Oph. Oph. 1949
1 Monument Sq., Beverly

SEALE, EARL S., a.s. Oph. Oph. 1940
126 Bay State Road

Shambaugh, George E., Jr., Otolar. 1932
55 E. Washington Street, Chicago, Ill.

SHEA, JOHN J., r. Otolar. (military service)
U.S. Naval Hospital
Bainbridge, Md.

Sheehan, Linus A., Oph. 1943
210 Angell, Providence, R. I.

Sherman, Morris, Otolar. 1950
82 W. Commerce St., Bridgeton, N. J.

SHLOSSBERG, FRANK R., a.s. Otolar.
116 Emerson, Haverhill

SKILLING, FRANCIS C., Oph. 1933
442 Ingram Bldg., Miami, Fla.

SLAUGHTER, EARL C., Otolar. 1940
Granada Bldg., Norfolk, Neb.

SLOANE, ALBERT E., a.s. Oph.
416 Marlborough

SMITH, HAROLD D., Otolar. 1937
342 Investment Bldg., Pomona, Calif.

SMITH, TAYLOR R., a. Oph.
(Oph. 1951) 243 Charles St.

SMITH, WILLIAM L., Oph. 1950
U.S. Naval Hospital, St. Albans, L. I., N. Y.

SNOW, ROBERT C., Otolar. 1940
202 E. So. Temple, Salt Lake City, Utah

SPENCER, RICHARD, a. an.
243 Charles St.

SPINOLA, EDMUNDO T. L., r. Otolar.

SPRATT, CHARLES N., Oph. 1904
1231 Medical Arts Bldg., Minneapolis, Minn.

STAPFF, VOLKER H., r. Otolar.

STEPHENS, H. FREDERICK, Oph. 1939
195 Thayer St., Providence, R. I.

STERNSTEIN, HERMAN J., a.s. Otolar.
416 Marlborough

STONE, WILLIAM, a. Oph. Oph. 1949
1101 Beacon

SULLIVAN, GARRETT L., a.s. Oph.
(Oph. 1938) 101 Bay State Road

TEGELBERG, JULIUS, Otolar. 1931
390 Main, Worcester

THOMAS, JOHN H., Otolar. 1944; Oph. 1946
262 E. Market, Warren, Ohio

THOMPSON, PETER HUNTER, cons. s. Oph.
(Oph. 1902) 308 Commonwealth Ave.

THORNE, FRED S., cons. s. Oph.
270 Commonwealth Ave.

TOBEY, HAROLD G., cons. s. Otolar.
(Aural 1915) 403 Commonwealth Ave.

TOOT, J. FREDERICK, Oph. 1922
520 First National Bank Bldg., Canton, Ohio

TROTTER, ROBERT R., Oph. 1951
Box 542, Media, Pa.

TWITCHELL, MARSHALL C., Oph. 1941
217 S. Union, Burlington, Vt.

VAIL, DERRICK T., Oph. 1924
700 N. Michigan Ave., Chicago, Ill.

VERHOEFF, FREDERICK H., cons. c. Oph.
395 Commonwealth Ave.

VIGER, ROLAND J., Oph. 1937
1414 Drummond, Montreal, Quebec, Can.

WAITE, J. HERBERT, cons. s. Oph.
(Oph. 1923) 7 Bay State Road

WALKER, D. HAROLD, cons. s. Otolar.
(Aural 1902) Peterborough, N. H.

WATTLES, F. MERRILL, Otolar. 1938
1200 So. Kuhl Ave., Orlando, Fla.

WAYLAND, MRS. GENEVA L., R.N. a. to Dir.
M.E. & E.I.

WEBSTER, FRANKLIN R., Oph. 1926
810 State Tower Bldg., Syracuse, N. Y.

WEBSTER, RICHARD C., JR., a. Otolar.
1101 Beacon

WEILLE, FRANCIS L., s. Otolar.
(Otolar. 1929) 247 Commonwealth Ave.

WEISMAN, HERMAN J., Otolar. 1944
76 Limerock, Rockland, Me.

WEST, FRANCIS J., a. Oph. Oph. 1947
1101 Beacon

WHITE, LEON E., cons. s. Otolar.
(Aural & Lar. 1923) 395 Commonwealth Ave.

WHITNEY, RAYMOND C., Oph. 1922
227 Union, New Bedford

WILKINS, SAMUEL H., cons. s. Oph.
270 Commonwealth Ave.

WILLIS, HARRY C., Aural & Lar. 1923
216 E. Nash, Wilson, N. C.

Winkler, Herman A., Otolar. 1926
224 Thayer, Providence, R. I.

Wishart, David E. S., Aural & Lar. 1922
47 Grosvenor, Toronto, Ont., Can.

WOODARD, M. WAYNE, a. Oph.,
(Oph. 1950) 9 Central, Lowell

Wright, Clarence F., Otolar. 1931
Weston, Ont., Canada

Wright, Edward N., Otolar. 1933
103 May St. South, Fort Williams, Ont., Can.

Zanek, Otto L., Oph. 1946
1704 Espercon Bldg., Houston, Tex.

ZEAVIN, BERNARD, r. Oph.

ZONDERMAN, BERNARD, a.s. Otolar.
(Otolar. 1946) 314 Commonwealth Ave.

Member of

Boston Hospital Council

American Hospital Association

Massachusetts Hospital Association

United Community Services of Metropolitan Boston

Approved by the American College of Surgeons

and the American Medical Association

Affiliated with the Harvard Medical School

In Memoriam

WALTER B. LANCASTER, M.D.

Consulting Surgeon in Ophthalmology

1897—Ophthalmic Clinical Assistant; 1898-1903—Assistant Surgeon; 1913—Assistant Surgeon; 1920—Ophthalmic Surgeon; 1923—Consulting Ophthalmic Surgeon.

HERMAN P. GROSSMAN, M.D.

Assistant Surgeon in Ophthalmology

1932—Ophthalmological Interne; 1934—Clinical Assistant; 1939—Assistant Surgeon.

Massachusetts Eye and Ear Infirmary

ONE HUNDRED and TWENTY SEVENTH

ANNUAL REPORT

1952-1953

BOSTON • MASSACHUSETTS

Massachusetts Eye and Ear Infirmary

ONE HUNDRED and TWENTY SEVENTH

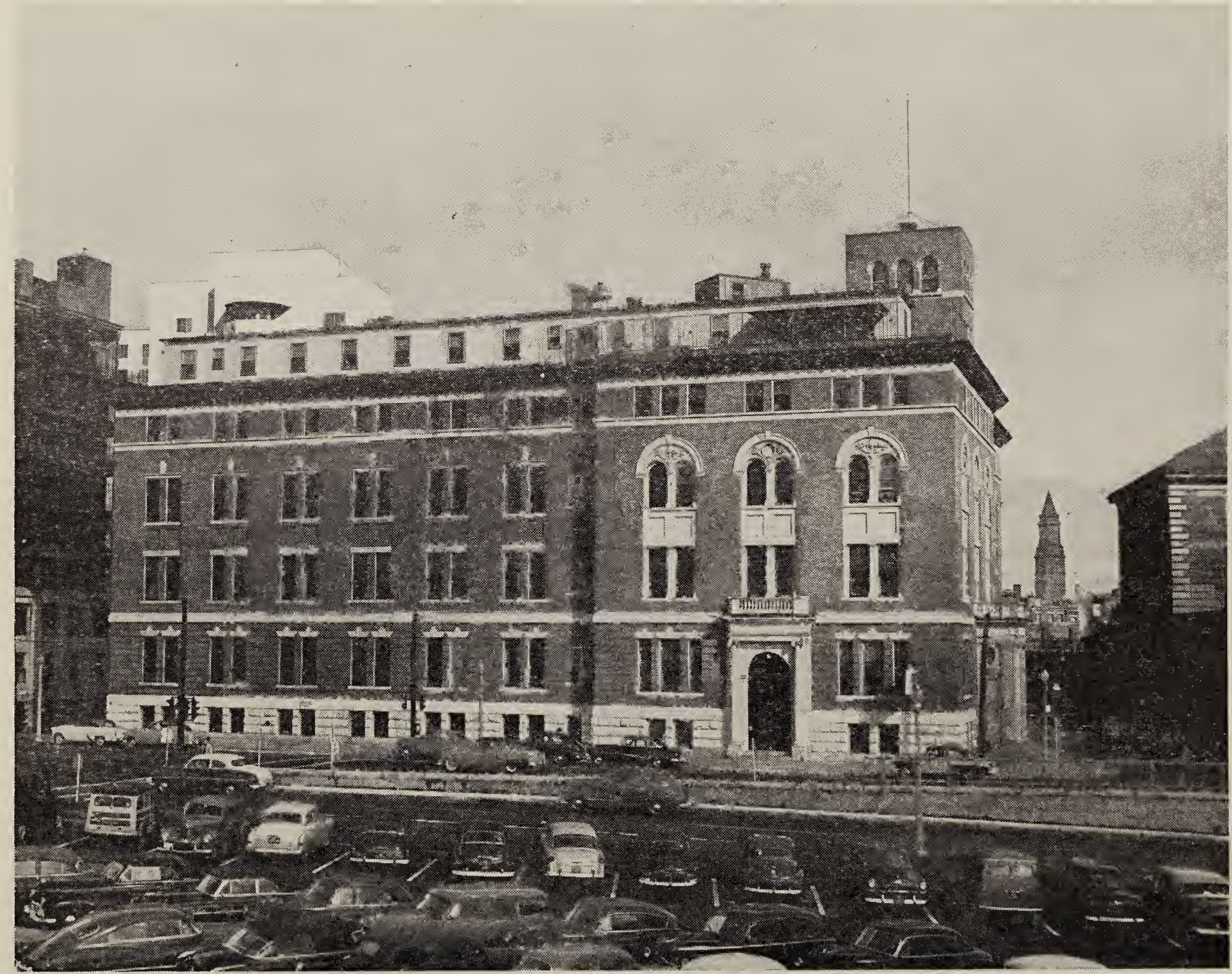
ANNUAL REPORT

1952-1953

Feby 23,1827

243 Charles Street, Boston 14, Massachusetts
Telephone: LAfayette 3-8230

BOSTON • MASSACHUSETTS



The MASSACHUSETTS EYE AND EAR INFIRMARY, 243 Charles Street, Boston, shown from the new Storrow Drive highway, with the hospital's parking area in the foreground.

MASSACHUSETTS EYE AND EAR INFIRMARY

Incorporated in 1827

The Massachusetts Eye and Ear Infirmary and its Out-Patient Clinics serve men, women and children from all over New England and beyond, who need expert care for diseases and injuries of the eye, ear, nose and throat. Established in 1824, the Infirmary is one of the two oldest hospitals in the country specializing in the preservation of good eyesight and sound hearing.

The Infirmary is a voluntary hospital — an independent, non-profit, private institution. The Board of Managers are non-paid and the Staff of specialists give their services without charge to patients in the clinics and on the wards. The hospital receives no support from city or state but is financed by receipts from patients, by voluntary gifts and bequests, and by its share in the Community Fund, as a "Red Feather Service." However, the Infirmary's allotment from the Community Fund is not sufficient to cover the amount the hospital gives in "free service" to patients from the Greater Boston area who cannot pay for their own care.

In many ways the Infirmary and the Massachusetts General Hospital, its neighbor, cooperate to give complete medical service to patients. The clinics of both hospitals share a common Admitting Office with its entrance on Fruit Street. Also, for maximum efficiency and economy, the two hospitals unite in such matters as purchasing, maintenance and personnel management.

The wards and out-patient clinics of the Infirmary are open to those who are not able to pay doctors' fees, since the Staff give their services without charge to such patients. Every patient, in the clinics and wards as well as in the private accommodations, is under the medical and surgical care of Staff doctors who are specialists in Ophthalmology and Otolaryngology.

Whenever the patient is already under the care of a doctor, arrangements for his admission to the Infirmary should be made by his own doctor or the patient should bring a letter from his doctor recommending admission to the hospital. However, any patient who is not under a doctor's care and who is not able to pay for private care, is eligible for treatment in the clinics and wards. In cases of emergency, of course, a patient is admitted immediately at any time of the day or night.

The clinics, located in the adjoining Out-Patient Department on Fruit Street, are open daily except Sunday and legal holidays* for a fee of $2.50† per clinic visit. After a preliminary interview, out-patients are examined by the clinic doctor and treatment is prescribed. If further treatment is necessary, the clinic patient is given an appointment for his next visit, as all but the first visit are by appointment only.

Patients are admitted to the wards by direct appointment with the Admitting Office, 243 Charles Street, from 9 to 10 A.M. daily except Sunday and legal holidays. Arrangement for admission to private and semi-private accommodations is made by the Staff doctor in charge of the patient who then comes on the appointed day to the Infirmary Admitting Office.

Daily rates for board and room for ward patients are $14† with special services like X-ray and operating room fees, extra. Rates for child patients are $14† in the ward, with semi-private charges of $16†. For adults, semi-private care on the fourth floor is in four-, five- and six-bed rooms at $16† per day. Private care is $19† to $22† for single room with lavatory, and $21† to $24† for single room with bathroom. These rates include general nursing and ordinary medicine.

Blue Cross (Associated Hospital Service) plans are accepted at the Infirmary, the benefits being allowed as soon as approval has been received. All other non-profit insurance is handled by the patient for himself and he pays the regular rates to the hospital.

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*Ear, nose and throat Clinic not open Saturdays in July and August.

†As of January, 1954.

Officers

BOARD OF MANAGERS, 1953

President	Henry Hixon Meyer, 53 State Street, Boston	1937
Secretary	Edmund V. Keville, 294 Washington Street, Boston	1942-43, 1945
Treasurer	Horace W. Frost, 74 State Street, Boston	1940

William H. Claflin, III	74 State Street, Boston	1947
Mrs. Richard Cary Curtis	215 Warren Street, Brookline	1940
Wallace Falvey*	10 Post Office Square, Boston	1950
Robert H. Hopkins	82 Devonshire Street, Boston	1951
James C. Howe	53 State Street, Boston	1914
Rev. Robert G. Metters	15 Newbury Street, Boston	1948
Patrick A. O'Connell*	154 Tremont Street, Boston	1934
William A. Parker	200 Berkeley Street, Boston	1935
Mrs. Sullivan A. Sargent	701 South Street, Needham	1945
Walter H. Trumbull	185 Meadow Brook Road, Weston	1929
Frederic Winthrop	Groton House, Ipswich	1943

* appointed by the Commonwealth

Corporation

(in addition to Managers)

William S. Ballard	45 Milk Street, Boston
Robert F. Bradford	53 State Street, Boston
Melville Chapin	84 State Street, Boston
Mrs. John W. Farley	898 South Street, Needham
Nathaniel Faxon, M.D.	25 Chestnut Street, Boston
Francis W. Hatch, Jr.	Suburban Centers, Shoppers' World, Framingham
Thomas H. Hoare	6 Beacon Street, Boston
Mrs. Francis T. Hunter	56 Lawrence Road, Chestnut Hill
Mrs. Varaztad H. Kazanjian	191 Clifton Street, Belmont
William F. Keesler, Jr.	69 Homestead Street, Newton
Arthur T. Lyman	37 Thatcher Street, Westwood
George A. McLaughlin	11 Pemberton Square, Boston
August R. Meyer	53 State Street, Boston
Harris P. Mosher, M.D.	127 Front Street, Marblehead
Miss Amelia Peabody	30 Ipswich Street, Boston
George L. Pew	17 Storer Street, Portland, Maine
Henry K. Porter	74 Foley Street, Somerville
Huston Rawls	84 State Street, Boston
Honorable Leverett Saltonstall	82 Devonshire Street, Boston
Frederick H. Verhoeff, M.D.	395 Commonwealth Avenue, Boston
D. Harold Walker, M.D.	5 Bay State Road, Boston
Howland S. Warren	1 Federal Street, Boston

Executive Committee: Mr. Meyer, Mr. Frost, Mr. Claflin, Mr. Metters

Finance Committee: Mr. Meyer, Mr. Frost, Mr. Parker

Social Service Advisory Committee: Mr. Falvey, *Chairman;* Mr. Metters, Mrs. Kazanjian, Mrs. Soule, Merrill J. King, M.D., Moses H. Lurie, M.D., Mr. Howe, Miss Meenan

Public Relations Advisory Committee: Mr. Hatch, *Chairman;* Mr. August Meyer, David G. Cogan, M.D.

House Committee: Mrs. Farley, *Chairman;* Mr. Hopkins, Abraham Pollen, M.D., Donald K. Lewis, M.D.

Administration

Director	Francis S. Hill
Assistant to the Director	Mrs. Geneva L. Wayland, R.N.
Administrative Assistants, Admitting Office	Ruth W. Hutchinson, R.N. Walborg L. Peterson, R.N. Henrietta Olsen, R.N. Mrs. Ethel M. Devine, R.N.
Superintendent, Nursing Service; Training School	Dorothy M. Tarbox, R.N.
Assistant Superintendent, Nursing Service; Training School	Hilde G. Blaisdell, R.N.
Director of Nursing Education	Mary E. Shepard, R.N.
Accounting	Raymond W. Lyons
Dietary	Patricia Walsh
Housekeeping	Roscoe Adams
Medical Social Service	Isabel Whiting
Optical Shop	Albert E. Maver
Occupational Therapy	Mrs. Patricia Huddleston
Public Relations	Mrs. Virginia Gerould
Volunteers	Marilyn G. Myers

Affiliated Department Heads

Advisor to Superintendent of Nursing Service; Training School	Ruth Sleeper, R.N.
Credit Manager	Francis M. Hernan
Coordinating Comptroller	Lawrence Martin
Director, Department of Dietetics; School of Dietetics	Louise Hatch
Director, Personnel Department	Edmund R. Mattos
Maintenance	Raymond V. Kinsman
Medical Records	E. Louise Seymour, R.R.L.
Out-Patient Department, Assistant Director	Michael White
Pharmacy	John Murphy
Purchasing	Allen H. Mathewson

Service Pins

Annah Remick
Nursing — 20 years

Mary Hynes
Nursing — 10 years

Charles Poland
Nursing — 10 years

Charles Rankin *(Retired)*
Nursing — 10 years

Malcolm Currie
Dietary — 10 years

Julia Hankus
Dietary — 10 years

Phyllis Brown
Administration — 10 years

Department of Ophthalmology

Chief of Ophthalmology
Edwin B. Dunphy, M.D.

Consulting Chief of Ophthalmology
Frederick H. Verhoeff, M.D.

Surgeons in Ophthalmology

Benjamin Sachs, M.D.
Paul A. Chandler, M.D.
William P. Beetham, M.D.
Virgil G. Casten, M.D.
Trygve Gundersen, M.D.
Merrill J. King, M.D.

Director of Pathology Laboratory
Parker Heath, M.D.

Associate Surgeons in Ophthalmology

David G. Cogan, M.D.
Brendan D. Leahey, M.D.
Hugh C. Donahue, M.D.
Mahlon T. Easton, M.D.

Assistant Surgeons in Ophthalmology

Albert E. Sloane, M.D.
Edward E. Covitz, M.D.
Paul G. Haire, M.D.
Garrett L. Sullivan, M.D.
S. Forrest Martin, M.D.
Thomas Cavanaugh, M.D.
Earl S. Seale, M.D.
A. William Collinson, M.D.
Carl C. Johnson, M.D.
Abraham Pollen, M.D.
Sumner D. Liebman, M.D.
Harry E. Braconier M.D.
Henry A. Mosher, M.D.
Karl Riemer, M.D.

Assistants in Ophthalmology

Henry F. Allen, M.D.
D. Robert Alpert, M.D.
Frederic Breed, M.D.
Robert J. Brockhurst, M.D.
Julian F. Chisholm, Jr., M.D.
Joseph M. Clough, M.D.
Thomas P. Cronin, M.D.
Edwin B. Goodall, M.D.
W. Morton Grant, M.D.
Warren D. Haley, M.D.
Linley C. Happ, M.D.
John M. Hill, M.D.
Joseph Lo-Presti, M.D.
Charles H. MacLaughlin, M.D.
M. Wayne Woodard, M.D.
Irwin T. Mancall, M.D.
Arthur M. Morrissey, M.D.
Bertha Offenbach, M.D.
Ichiro D. Okamura, M.D.
Richard B. Pippitt, M.D.
Charles D. Regan, M.D.
Paul M. Runge, M.D.
Charles L. Schepens, M.D.
David H. Scott, M.D.
Taylor R. Smith, M.D.
William Stone, Jr., M.D.
Robert R. Trotter, M.D.
Francis J. West, M.D.

Residents in Ophthalmology

Peter Beck, M.D.
S. James Bullington, M.D.
Richard B. Chapman, M.D.
David D. Donaldson, M.D.
Robert J. Fink, M.D.
Robert J. Herm, M.D.
David S. Johnson, M.D. (Military Service)
Robert Leavelle, M.D.
William Lincoff, M.D.
Daniel F. Milam, M.D.
William Patterson, M.D.
John J. Ragan, M.D.
Alfred W. Scott, M.D.
Bernard Zeavin, M.D.

CONSULTING SURGEONS IN OPHTHALMOLOGY

Peter H. Thompson, M.D.
Hugo B. C. Riemer, M.D.
J. Herbert Waite, M.D.
Edmund W. Clap, M.D.
Samuel Wilkins, M.D.
Ralph H. Ruggles, M.D.

Department of Otolaryngology

Chief of Otology and Laryngology
LeRoy A. Schall, M.D.

Surgeons in Otolaryngology
Philip E. Meltzer, M.D.
Moses H. Lurie, M.D.
Robert L. Goodale, M.D.
Francis L. Weille, M.D.
Charles I. Johnson, M.D.
Maurice G. Evans, M.D.
Vincent J. Kelley, M.D.

Surgeon for Bronchoscopy and Esophagoscopy
John R. Richardson, M.D.

Surgeon for Tumor Clinic
Carl H. Ernlund, M.D.

Surgeon for Plastic Operations
Edgar M. Holmes, M.D.

Director of the Mosher Laboratory
Werner Mueller, M.D.

Associate Surgeons in Otolaryngology
Charles H. Allman, M.D.
Walter J. E. Carroll, M.D.
John R. Frazee, M.D.
Joseph Lentine, M.D.
Burton E. Lovesey, M.D.
J. Charles Drooker, M.D.
Herman J. Sternstein, M.D.

Research Associate
George Kelemen, M.D.

Assistant Surgeons in Otolaryngology
Donald K. Lewis, M.D.
Elizabeth DeBlois, M.D.
Daniel Miller, M.D.
Calvin M. Cerrato, M.D.
Aram Roopenian, M.D.
Frank R. Shlossberg, M.D.
Bernard Zonderman, M.D.
Charles Kent, M.D.
Edward F. Lawlor, M.D.
John E. McKeigue, M.D.
Maurice Ruben, M.D.

Assistants in Otolaryngology
Herbert J. Dietrich, M.D.
Lawrence Hirsch, M.D.
Alfred T. Joseph, M.D.
Kenneth Kazanjian, M.D.
Joseph P. McEneaney, M.D.
Frederic McIntire, Jr., M.D.
George F. Reed, M.D.
William P. Rogers, M.D.
Alphonse L. Senecal, M.D.
Morris Swartz, M.D.
John C. Trakas, M.D.
Richard C. Webster, Jr., M.D.

Assistant for Bronchoscopy and Esophagoscopy
Edward B. Benedict, M.D.

Residents in Otolaryngology
Stewart M. Frame, M.D.
Arcadius Hakim, M.D.
Robert E. Klotz, M.D.
Jack Malkoff, M.D.
Daniel E. M. Martinez, M.D.
William W. Montgomery, M.D.
Piero Perone, M.D.
Earle W. Rice, M.D.
Yunis M. Sa'eed, M.D.
Edmundo T. L. Spinola, M.D.

CONSULTING SURGEONS IN OTOLARYNGOLOGY

Joseph L. Goodale, M.D.
D. Harold Walker, M.D.
Frederick L. Bogan, M.D.
Harry A. Barnes, M.D.
Harris P. Mosher, M.D.
Leon E. White, M.D.
George H. Poirier, M.D.
Edwards W. Herman, M.D.
Varaztad H. Kazanjian, M.D.
Harold H. Tobey, M.D.
Gustave B. Fred, M.D.
Philip Mysel, M.D.
Josiah E. Quincy, M.D.
Lyman G. Richards, M.D.

Anesthesiologist
James C. Appleton, M.D.

Roentgenologist
A. S. Macmillan, M.D.

Pediatrician
Allan M. Butler, M.D.

Consulting Physicians

Fuller Albright, M.D.
Joseph C. Aub, M.D.
Myles P. Baker, M.D.
Victor G. Balboni, M.D.
Walter Bauer, M.D.
Robert L. Berg, M.D.
Edward F. Bland, M.D.
Allen G. Brailey, M.D.
Walter S. Burrage, M.D.
John W. Cass, Jr., M.D.
Earle M. Chapman, M.D.
Richard W. Clark, M.D.
Milton H. Clifford, M.D.
Perry J. Culver, M.D.
Briant L. Decker, M.D.
Charles H. DuToit, M.D.
Daniel S. Ellis, M.D.
Dana L. Farnsworth, M.D.
John H. Fay, M.D.
Greene Fitz-Hugh, M.D.
Anne P. Forbes, M.D.
Ivan D. Frantz, Jr., M.D.
Allan L. Friedlich, Jr., M.D.
Harriet L. Hardy, M.D.
Reed Harwood, M.D.
Francis T. Hunter, M.D.
Bernard M. Jacobson, M.D.
Chester M. Jones, M.D.
Alfred Kranes, M.D.
Alexander Leaf, M.D.
Jacob Lerman, M.D.
Janet W. McArthur, M.D.
John P. Monks, M.D.
Gordon S. Myers, M.D.
Robert S. Palmer, M.D.
Arthur S. Pier, Jr., M.D.
Helen S. Pittman, M.D.
Marion W. Ropes, M.D.
David D. Rutstein, M.D.
Charles L. Short, M.D.
Howard B. Sprague, M.D.
John B. Stanbury, M.D.
George P. Sturgis, M.D.
Thomas A. Warthin, M.D.
Arthur L. Watkins, M.D.
Roy R. Wheeler, M.D.
Conger Williams, M.D.
Paul C. M. Zamecnik, M.D.
John W. Zeller, M.D.

Consulting Dermatologists

John Adams, Jr., M.D.
Chester N. Fazier, M.D.
William R. Hill, Jr., M.D.
Walter F. Lever, M.D.
Mildred Ryan, M.D.
Maurice M. Tolman, M.D.

Consulting Pathologists

William J. Brickley, M.D.
Benjamin Castleman, M.D.
Robert H. Fennell, M.D.
Francis T. Hunter, M.D.
David Kahn, M.D.
Michael A. Luongo, M.D.
Winfield S. Morgan, M.D.
Robert E. Scully, M.D.
Donald C. Sniffen, M.D.
Edgar B. Taft, M.D.
Austin L. Vickery, Jr., M.D.

Consulting Radiologists

John F. Gibbons, M.D.
Joseph Hanelin, M.D.
Laurence L. Robbins, M.D.
Milford D. Schulz, M.D.
Richard V. Wilson, M.D.
Stanley M. Wyman, M.D.

Consulting Endoscopist
Edward B. Benedict, M.D.

Consulting Bacteriologist
Louis Dienes, M.D.

Consultant in Contagious Disease
Edwin H. Place, M.D.

Consultant in Preventive Medicine
John E. Gordon, M.D.

Consultant in Pharmacology
Otto Krayer, M.D.

Consulting Urologists

Sylvester B. Kelley, M.D.
Walter S. Kerr, M.D.
Howard I. Suby, M.D.
Lorande M. Woodruff, M.D.

Consulting Neurologists

John A. Abbot, M.D.
Raymond D. Adams, M.D.
Madelaine R. Brown, M.D.
G. Colket Caner, M.D.
Edwin M. Cole, M.D.
Edward P. Richardson, M.D.
Robert S. Schwab, M.D.
Maurice Victor, M.D.

Consulting Psychiatrists

Herbert Barry, Jr., M.D.
Henry H. Brewster, M.D.
Stanley Cobb, M.D.
Daniel C. Dawes, M.D.
Volta R. Hall, M.D.
Paul Howard, M.D.
Lucie J. Jessner, M.D.
Erich Lindemann, M.D.
Alfred O. Ludwig, M.D.
Avery D. Weisman, M.D.
LeMoyne White, M.D.
Vernon P. Williams, M.D.
Elizabeth Zetzel, M.D.

Consulting Pediatricians

Frederic M. Blodgett, M.D.
T. Berry Brazelton, M.D.
Leo B. Burgin, M.D.
Allan M. Butler, M.D.
Allen Cohen, M.D.
Charles D. Cook, M.D.
John D. Crawford, M.D.
Ralph W. Daffinee, M.D.
John A. V. Davies, M.D.
William A. Dickson, M.D.
Edward C. Dyer, M.D.
LeRoy L. Eldredge, Jr., M.D.
Robert N. Ganz, M.D.
Theodore S. Golden, M.D.
Samuel Kaplan, M.D.
William F. Ketchum, M.D.
Joseph L. Lewis, M.D.
Arthur J. Linenthal, M.D.
Francis C. McDonald, M.D.
William Pferrer, M.D.
Gertrud C. Reyersbach, M.D.
Ralph A. Ross, M.D.
Kenneth F. Sands, M.D.
Louis I. Skirball, M.D.
Clement A. Smith, M.D.
Nathan B. Talbot, M.D.
Richard C. Tefft, M.D.
William J. Turtle, M.D.
Wilhelmina VanDyke, M.D.
William McL. Wallace, M.D.
Louis Weinstein, M.D.
Elenore C. Zaudy, M.D.

Consulting Surgeons

Marshall K. Bartlett, M.D.
Bradford Cannon, M.D.
Edward D. Churchill, M.D.
Oliver Cope, M.D.
Gordon A. Donaldson, M.D.
Ward I. Gregg, M.D.
Edward Hamlin, Jr., M.D.
E. Parker Hayden, M.D.
Francis M. Ingersoll, M.D.
Robert R. Linton, M.D.
John B. McKittrick, M.D.
Ira T. Nathanson, M.D.
Horatio Rogers, M.D.
Gordon Scannell, M.D.
Fred A. Simmons, Jr., M.D.
Richard H. Sweet, M.D.
Grantley W. Taylor, M.D.
Howard Ulfelder, M.D.
Richard Warren, M.D.
Claude E. Welch, M.D.

Consulting Neurosurgeons

H. Thomas Ballentine, Jr., M.D.
William H. Sweet, M.D.
James C. White, M.D.

Consulting Orthopedists

Otto E. Aufranc, M.D.
Joseph S. Barr, M.D.
Thornton Brown, M.D.
Edwin F. Cave, M.D.
Robert J. Joplin, M.D.
Armin Klein, M.D.
Paul L. Norton, M.D.
Eugene Record, M.D.
John A. Reidy, M.D.
Carter Rowe, M.D.

Out-Patient Department

Assistant Director in charge of the Out-Patient Department . . . . Michael White

Administrative Assistant . . . . Margaret Meenan, R.N.

EYE CLINIC
- Glaucoma Section
- Orthoptic Section
- Perimetry Room
- Refraction Room
- Tension Room

EAR, NOSE AND THROAT CLINIC
- Hearing Test Room
- Consultation: Tumor Clinic
  - Allergy Clinic
  - Plastic Clinic

Winthrop Foundation and Clinic for the Deaf

CLINICAL RESEARCH

REHABILITATION

Surgeon in Charge
Philip E. Meltzer, M.D.

Associate Surgeon
Donald K. Lewis, M.D.

Assistant Surgeon
Bernard Zonderman, M.D.

Audiologist
Alan S. Feldman

Executive Committee
D. Harold Walker, M.D., *Chairman*
LeRoy A. Schall, M.D.
Harold G. Tobey, M.D.
Moses H. Lurie, M.D.
Philip E. Meltzer, M.D.

Howe Laboratory of Ophthalmology

Director
David G. Cogan, M.D.

Staff
W. Morton Grant, M.D.
David D. Donaldson, M.D.
Jin H. Kinoshita
Robert R. Trotter, M.D.
Toichiro Kuwabara, M.D.
Harold L. Kern

The Boston Eye Bank—Serving New England

Executive Committee
Edwin B. Dunphy, M.D.
Henry Hixon Meyer
Mrs. Jane S. Willis
William S. Ballard
Brendan D. Leahey, M.D.

General Director: Garrett L. Sullivan, M.D.

Executive Secretary: Marilyn G. Myers

Report of the Board of Managers

It is axiomatic that every hospital have plans for the future. Whether they envisage expansion, contraction or a static condition, they must, from time to time, be subjected to critical review in the light of current trends and a considered guess as to future prospects. Such a review of the Infirmary's plans is appropriate at this time, and I propose in this report to lay its foundation.

Planning at the Infirmary is based on the premise that of its three functions, care of patients shall receive primary consideration. Teaching and research, though assigned to secondary roles, shall be supported and promoted to the extent that they contribute, now and in the future, to care of patients. We believe that reasonable opportunity should be afforded all members of our staff to undertake research in their particular specialties, subject of necessity to limitations of space and finances, and to approval of the project by the Chief of the Department. We recognize, also, that the obligations of the Infirmary extend way beyond the limits of Metropolitan Boston and that we must provide service in our specialties wherever needed, especially throughout New England.

IMPROVED CARE OF PATIENTS

During the last few years care and comfort of patients has been improved substantially by renovations and additions to the physical facilities and by advances in medical science and surgical skills. This improvement has increased the demand for private and semi-private beds, notwithstanding a continued decline in the average stay of patients in the hospital. At times the Infirmary has been unable to meet this demand with the result that the members of the staff have been forced to take patients to other hospitals, thereby increasing their working hours, which are already too long. This situation has been alleviated to some extent by the assignment to the Infirmary of 13 beds at Massachusetts General Hospital. This arrangement, though of great help, creates many administrative problems for both hospitals and does not provide a permanent solution for bed requirements, location and efficiency.

Administrative facilities are related closely to patient care. The space now allotted to these purposes is inadequate because it was designed for a lighter load than that now carried. It should be increased to take care of both present and prospective needs.

Research is conducted throughout the Infirmary wherever space can be found. Not one project has sufficient room and, at the moment, not a square foot is available for this purpose. Nevertheless, results attained in research at the Infirmary have been significant and demonstrate the necessity of providing more efficient and expanded quarters.

Then there are the teaching activities in which the Infirmary engages — undergraduate students at medical schools, residents, post-graduate students, nurses, and technicians. As many as possible of each category must be trained in our specialties, to continue the fine work of the Infirmary and to fill the great demand from other areas and hospitals. Some improvement should be undertaken in the space devoted to this indispensable program. Long-range plans should include an assembly room suitable for the meetings of the New England societies in our specialties.

During the past two years the Out-Patient Department, operated jointly by the Infirmary and Massachusetts General Hospital, has been the subject of study by the two institutions. Steps have been taken to improve this important department, but much remains to be accomplished and plans for the future must take into consideration the probable relocation of this service by the two hospitals.

As the first step in meeting the needs of the Infirmary, the Managers propose to erect three new floors on top of the four-story building on Fruit Street which adjoins the Infirmary and now houses part of the Out-Patient Department. Construction should start this year. The new floors will provide in all approximately 15,000 square feet of usuable space and will contain a large part of the research activities, the technical libraries of both services, and part of the teaching facilities. Space on the first floor of the hospital, now occupied by the Howe Laboratory and the libraries, will be released for administrative purposes.

The Managers have been impressed this year as never before by the understanding and devotion to duty of those who make the Infirmary. We also record with sorrow the recent death of Mr. C. Joseph Maney, a conscientious member of the corporation, a generous benefactor of the Infirmary and a devoted friend.

Henry Hixon Meyer,
President

Treasurer's Report

THE figures which accompany this report reflect the first full year of the new accounting period recommended by the Massachusetts Hospital Association and adopted by many other hospitals. They show the results of thirteen periods of four weeks each ending October 4, 1953 and are not strictly comparable with earlier reports on a calendar year basis.

Increased occupancy at improved rates combined with economical administration resulted in a profit for the year. However, sharp upward adjustments in wage scales accompanied by diminished workloads, effective in September 1953, will result in a substantial increase in expenses for which no added income is in prospect. Therefore a reserve has been set up from the operations of this fiscal year in order to lessen the impact of these increases on the coming year.

Lest the operations of one year should be misleading, it should be noted that in every calendar year from 1943 to 1951 inclusive there were deficits which resulted in charges against unrestricted capital amounting to over $280,000. These charges included extraordinary expenses for the renovation of the hospital to meet the most urgent requirements.

It is a pleasure to report that within the past two years the Infirmary has received substantial additions to its capital funds through legacies and trust funds from generous friends. The income from these funds will help to meet out ever-increasing needs for improved facilities both for patient care and research. As noted last year in this Report, new construction must be provided for research projects which are now badly hampered by crowded quarters.

There is submitted herewith a condensed statement of the assets and liabilities of the Infirmary as of October 4, 1953, together with a summary of the income and expenses for the year, as prepared by our auditors, Messrs. Patterson, Teele & Dennis. There is also shown an analysis of the investments in securities as of October 2, 1953 as prepared by the undersigned.

HORACE W. FROST,
Treasurer

SUMMARY OF INVESTMENTS

	Book Value*	Market Value*	% Market Value
BONDS:			
U.S. Government	$1,293,535	$1,288,307	28.1%
Canadian Government	48,572	48,825	1.1%
Railroad	241,776	220,107	4.8%
Public Utility	65,203	57,142	1.2%
Industrial	78,601	76,050	1.7%
Financial	56,012	55,900	1.2%
Miscellaneous	1,001	1,001	—%
TOTAL BONDS	$1,784,700	$1,747,332	38.1%
PREFERRED STOCKS:	$ 171,547	$ 167,333	3.6%
COMMON STOCKS:			
Railroad	$ 170,355	$ 225,270	4.9%
Public Utility	398,055	466,091	10.1%
Industrial	851,117	1,234,771	26.9%
Bank, Insurance and Miscellaneous	518,964	623,004	13.6%
Investment Trust	25,000	30,675	0.7%
TOTAL COMMON STOCKS	$1,963,491	$2,579,811	56.2%
TOTAL GENERAL FUND	$3,919,738	$4,494,476	97.9%
WINTHROP FUND	85,675	85,983	1.9%
WEBER FUND	10,100	9,905	0.2%
GRAND TOTAL	$4,015,513	$4,590,364	100.0%

* Cents omitted

INCOME ACCOUNT

FOR THE PERIOD ENDED OCTOBER 4, 1953 (52 WEEKS)

Hospital Income as Per Director's Report			$1,203,944.59
Less: Hospital operating expenses as per Director's report		$1,383,311.21	
Hospital operating expenses charged directly against Permanent Funds		35,257.27	
		$1,418,568.48	
Deduct: Hospital operating expenses charged directly against Permanent Funds:			
Permanent Funds — Income	$ 8,330.40		
Permanent Funds — Principal	$26,926.87	35,257.27	
Net Hospital Expenses			1,383,311.21
Excess of Hospital Expenses Over Hospital Income			$ 179,366.62
Income from investment securities, less income applicable to Restricted Funds not expended		$ 149,089.23	
Receipts from United Community Services, Committee of the Permanent Charity Fund, Inc., Estates of Elisha V. Ashton, Laurabel L. Gray, G. Gorham Peters, Robert B. Brigham and Samuel C. Howes		73,487.81	
		$ 222,577.04	
Less: Treasurer's disbursements		11,633.84	210,943.20
Excess of Income over Expenditures on Income Account			$ 31,576.58
Deduct: Unexpended income reserved for increased costs			25,000.00
Balance Transferred to General Fund			$ 6,576.58

OPERATING ANALYSIS

FOR THE PERIOD ENDED OCTOBER 4, 1953 (52 WEEKS)

Income from Patients	$1,302,596.17
Income from Other Sources	59,082.48
Total Gross Hospital Income	$1,361,678.65
Allowances to Patients for "free care"	$ 115,455.77
Further Deductions for Bad Debts	13,253.48
Allowances to Blue Cross and Other Agencies	29,024.81
Total Free Service	$ 157,734.06
Net Income	$1,203,944.59
Salaries and Wages	$ 757,014.79
Supplies and Expenses	407,510.99
Out-Patient Department Expenses	164,302.03
Extraordinary Expenses	54,483.40
Total Operating Expenses	$1,383,311.21
Total Hospital Deficit	$ 179,366.62

Balance Sheet

OCTOBER 4, 1953

ASSETS

Plant:		
Land and buildings acquired prior to January 1, 1949 (book value)	$ 491,741.99	
Additional facilities acquired since January 1, 1949 (cost)	818,354.20	$1,310,096.19
Investments — book value:		
Securities	$4,015,517.38	
Interest in parcel of real estate	1.00	4,015,518.38
Cash:		
Capital	$ 324,264.21	
Income — restricted	26,009.23	350,273.44
Accounts receivable:		
Patients (less reserve)	$ 72,147.83	
Miscellaneous	5,466.43	77,614.26
Inventory of supplies, etc.		18,473.68
Construction in progress		10,832.13
TOTAL		$5,782,808.08

LIABILITIES AND FUNDS

Advances from patients	$ 1,967.91
Accounts payable and accruals	72,950.55
Special Funds — cash — suspense	2,442.75
General Fund Income Reserved	25,000.00
General Fund	2,759,765.54
Research Fund	20,000.00
Permanent Funds — Income Restricted	688,904.88
Permanent Funds — Income Unrestricted	2,130,241.36
Special Purpose Funds	55,525.86
Unexpended Restricted Income of Permanent Funds	26,009.23
TOTAL	$5,782,808.08

Gifts and Grants*

The Massachusetts Eye and Ear Infirmary is grateful for all gifts, large and small. We appreciate the thoughtful friends who send glasses no longer used, the grateful patient who leaves a few dollars for a "free bed" fund, and the loyal supporters who give generously year after year. But because of space limitations, only financial gifts of $50 or more for the current year can be listed in this Annual Report.

BOSTON EYE BANK FUND		
Mrs. Alice Capers	$ 1,000.00	
Mrs. Nelson J. Darling, Jr.	50.00	
Jackson & Moreland Employees — memorial gift	150.00	
Junior League of Boston — for teaching	250.00	
Mrs. Frederick Leviseur	50.00	
New Hampshire Association of the Blind (2 gifts)	1,000.00	
Other Gifts	443.50	
		$ 2,943.50
BOSTON EYE BANK RESEARCH FUND		
Junior League of Boston		$ 4,300.00
BOUTWELL FUND		
Mrs. Marion Boutwell (2 gifts)		$ 5,071.00
DR. CHANDLER'S RESEARCH FUND		
Mrs. Rose Cohen		$ 100.00
CHRISTMAS FUND		
Estate of Lotta Crabtree	$ 100.00	
Ladies' Visiting Committee	125.00	
Other Gifts	4.00	
		$ 229.00
CURED CANCER CLUB FREE BED FUND		
Cured Cancer Club		$ 1,500.00
DEAN FUND FOR DESTITUTE LITTLE CHILDREN		
Dean Welfare Trust (2 gifts)	$ 700.00	
Dean Foundation	500.00	
		$ 1,200.00
DR. DUNPHY TESTIMONIAL FUND		
Dr. R. J. Terry	$ 100.00	
Dr. & Mrs. T. Alan Devan	100.00	
		$ 200.00
ESOPHAGEAL VOICE CANCER FUND		
American Cancer Society, Mass. Div. (yearly grant)		$ 4,800.00
EYE PATHOLOGY LABORATORY		
Kresge Foundation		$ 4,500.00
EYES FOR THE NEEDY FUND FOR SOCIAL SERVICE		
New Eyes for the Needy		$ 1,000.00
ITALIAN MEMORIAL FUND		
Joseph Buccolo	$ 50.00	
Anthony Farina	1,000.00	
Italian American Society	1,000.00	
Catania Spagna Corporation	52.00	
Women's Italian Club of Boston	100.00	
Other Gifts	219.50	
		$ 2,421.50
MOSHER LABORATORY FUND		
Samuel Cline	$ 100.00	
Godfrey M. Hyams Trust	2,500.00	
Mrs. Gardiner Lane	200.00	
Mrs. S. J. Shallow	500.00	
Newbury, Inc.	5,000.00	
Other Gifts	10.00	
		$ 8,310.00

NURSERY FUND		
Mr. & Mrs. William H. Claflin, Jr.		$ 200.00
OCCUPATIONAL THERAPY FUND		
Ladies' Visiting Committee (yearly gift)	$ 250.00	
Leo F. Madigan	200.00	
Other Gifts	20.00	
		$ 470.00
OTOSCLEROSIS FUND		
Mr. & Mrs. Jacob Shore		$ 250.00
PATIENTS' FUND		
Mrs. Taylor Black	$ 100.00	
Estate of Lotta Crabtree	240.00	
A. S. MacDonald	50.00	
Mass. Charitable Fire Society	75.00	
Other Gifts	70.50	
		$ 535.50
PREMATURE BABY FUND		
C. Amsterdam	$ 1,000.00	
Other Gifts	25.00	
		$ 1,025.00
RETINA FOUNDATION FUND		
Vivian B. Allen Foundation		$14,300.00
RETINA PATIENTS' FUND		
Mrs. Dorothy Masters	$ 100.00	
Mrs. William W. McCarthy (memorial gift)	50.00	
Other Gifts	10.00	
		$ 160.00
SOCIAL SERVICE FUND		
Ladies' Visiting Committee (yearly gift)	$ 250.00	
Permanent Charity Fund (yearly grant)	850.00	
		$ 1,100.00
SOCIAL SERVICE CANCER FUND		
American Cancer Society, Mass. Div. (yearly grant)		$ 1,000.00
DR. WILLIAM STONE, JR., RESEARCH FUND		
Boston Lions Club	$ 1,300.00	
Godfrey M. Hyams Trust	7,500.00	
Miss Amelia Peabody	1,300.00	
National Society for the Prevention of Blindness	2,000.00	
Dr. Stone	380.00	
		$12,480.00
NELSON E. WEEKS FUND		
Permanent Charity Fund (yearly grant)		$ 1,250.00
DR. WEILLE FUND		
Anonymous	$ 1,000.00	
Mrs. Anna K. Bean	500.00	
Miss Amelia Peabody	4,670.53	
Other Gifts	25.00	
		$ 6,195.53
WINTHROP RESEARCH FUND		
Mrs. Standish Bradford	$ 200.00	
Dr. Philip E. Meltzer	300.00	
Sara T. Winthrop Memorial Fund	3,000.00	
		$ 3,500.00

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*Not including Building Fund

Ladies Visiting Committee

Chairman	Mrs. Varaztad H. Kazanjian
Vice-Chairman	Mrs. Francis T. Hunter
Secretary	Mrs. Roy R. Wheeler
Treasurer	Mrs. Henry E. W. Cunningham

During 1952, Mrs. Francis T. Hunter capably led the Ladies Visiting Committe in furthering our purpose to help the Board of Directors and the physicians of the Infirmary maintain and further the welfare of patients and nurses.

In carrying out this purpose, the Committee has participated in many diversified activities, such as furnishing and decorating a smoking room for the women patients, purchasing children-size furniture for the Winthrop Foundation, and providing the Infirmary with new X-ray and anaesthesia machines. Through the Committee, friends of the Infirmary generously gave television sets to the wards and small gifts for special occasions to employees of the hospital.

In the Nurses' Residence, the Committee augmented the furnishings with the addition of nine peel chairs for viewing television. Small equipment was purchased for the new third-floor kitchen, as well as a punch bowl, glasses, and plates. Under the direction of Mrs. McCarthy, Chairman of the Decorating Committee, material was selected and new slip covers have been made for the large living room. The usual magazine and newspaper subscriptions have been maintained.

Several additions to the Occupational Therapy Department have produced a greater amount of ease and efficiency in the work. A large, combination work-counter and supply-storage cabinet was purchased, with counters constructed so that patients in wheel chairs may work in comfort. A supply of toys was made available for the amusement of children while recuperating in the hospital. This is a continuing need as the toys are usually taken home by the patients. The usual Thanksgiving and Christmas gifts, candies, and decorations were provided. The Committee also had the piano tuned.

Mrs. Farley, as Chairman of the House Committee, reports progress in the planning of future necessary changes in the physical plant of the Infirmary, primarily in the basement area. It is hoped that the work will be completed next year.

The Social Service Department and the Occupational Therapy Department are given funds each year, to permit extension of their services beyond that covered by the Infirmary budget. In addition to regular funds, a specific sum was given to the Social Service Department for the special home training of a handicapped child.

The Volunteer Department requested and received funds to purchase cherry-red smocks for the use of volunteer workers. This is the official smock color selected by the Committee on Women's Hospital Auxiliaries of the American Hospital Association, and worn by all women volunteers working in hospitals.

Mrs. Thacher, Chairman of the Annual Rummage Sale Committee, reported most successful sales in 1952 and 1953, the proceeds in both cases exceeding the previous year. The Sale, held each spring at Horticultural Hall, continues to be the Committee's main source of income. Morning Coffee Parties and Afternoon Teas, given by individual members of the Committee, resulted in the collection of large amounts of rummage. Mrs. Curtis and Mrs. Thacher gave a morning Coffee Party for the Infirmary personnel whose rummage packages contributed to the success of the Sale.

A five-piece silver tea service, donated by a friend of the Infirmary for the 1953 Rummage Sale, was given to the Infirmary by the Committee. Mrs. Reese completed this silver service, which filled a long-existing need, with the gift of a large silver kettle. Mrs. Curtis' gift of a twenty-four cup, electric percolator has been greatly appreciated. Tarnish-proof bags for the silver were contributed by a Committee member.

Mrs. Hunter, Chairman of the Cart Shop Committee, has demonstrated the convenience of the Cart Shop for Infirmary patients and personnel, both groups patronizing it liberally. To date, the net profits from the Cart Shop have added several hundred dollars to our treasury.

Mrs. Vinsonhaler, Chairman of the Flower Committee, has arranged for seasonal flowers and plants to be placed in the rotundas, the Admitting Office, and the Surgeons' Parlor. Committee members purchased artificial dogwood and Mrs. Fay arranged for the planting of the balcony flower boxes.

The Ladies Visiting Committee has been represented by the Chairman at meetings of the Massachusetts Hospital Association, the Committee of Hospital Auxiliaries, the Council of Social Work in Medical Care, the United Community Services, the Coordinating Committee of the Massachusetts General Hospital, the Social Service Advisory Committee, and the Board of Managers of the Infirmary. On the invitation of Mrs. Thorndike, the Chairman also attended a most interesting meeting of the Ladies Visiting Committee of the Massachusetts General Hospital. Mrs. Hunter and Mrs. Bock have represented the Infirmary at the Coordinating Meetings at the Massachusetts General Hospital.

The following members have been welcomed to our Committee during the past twenty-one months:

Mrs. William A. Barron, Jr.
Mrs. Joseph M. Clough
Mrs. E. K. Conneely
Mrs. Bartlett Harwood
Mrs. Valentine Hollingsworth
Mrs. Herbert Kelley
Mrs. Benjamin Sachs
Mrs. Foster Trainor
Mrs. George Vinsonhaler
Mrs. Stewart C. Woodworth

The Committee regretfully accepted the resignations of the following members:

Mrs. John Bryant
Mrs. E. K. Conneely
Mrs. Henry W. Minot
Mrs. Edward J. R. Ropes
Mrs. Ralph Waterman
Mrs. Gordon K. White

The Committee records with deep regret the passing of Mrs. Reginald Foster who devoted long years of loyal service to the Committee and the Infirmary.

Marion H. Kazanjian,
Chairman, Ladies Visiting Committee

ACTIVE MEMBERS

Mrs. William A. Barron, Jr.
Mrs. Arlie V. Bock
Mrs. Harry P. Cahill
Mrs. Nathaniel D. Clapp
Mrs. Joseph M. Clough
Mrs. Richard C. Curtis
Mrs. Livingston Davis
Mrs. Weld Douglas
Mrs. Edwin B. Dunphy
Mrs. Henry Erhard
Mrs. John Farley
Mrs. Henry H. Fay
Mrs. Trygve Gundersen
Mrs. George F. Hall
Mrs. Bartlett Harwood
Mrs. Harold L. Higgins
Mrs. Valentine Hollingsworth
Mrs. Herbert Kelley
Mrs. Henry Loomis
Mrs. Andrew Mason
Mrs. William McCarthy
Mrs. Henry D. Minot
Mrs. Noel Morss
Mrs. Harris P. Mosher
Mrs. Alfred Peabody
Mrs. Harold Peabody
Mrs. Henri Prunaret
Mrs. Franklin A. Reece
Mrs. Arthur L. Richmond
Mrs. Benjamin Sacks
Mrs. Ernest J. Sargent
Mrs. Sullivan A. Sargent
Mrs. LeRoy A. Schall
Mrs. Henry R. Scott
Mrs. Dwight Siscoe
Mrs. Reginald H. Smith
Mrs. Reginald H. Smithwick
Mrs. William B. Snow
Mrs. Leslie Soule
Mrs. Channing S. Swan
Mrs. Thomas C. Thacher, Jr.
Mrs. John E. Thayer
Mrs. Benjamin A. G. Thorndike
Mrs. Foster Trainor
Mrs. Robert Truesdale
Mrs. F. H. Verhoeff
Mrs. George Vinsonhaler
Mrs. Lyon Weyburn
Mrs. Andrew Winslow, Jr.
Mrs. Stewart C. Woodworth

Honorary Member
Miss Sally Fairchild

Comparative Statistics

HOSPITAL

	1952	1953
Ward Patients — Eye Cases	1,624	1,742
Ear, Nose, and Throat Cases	1,522	1,322
Total admitted to Wards	3,146	3,064
Private Patients — Eye Cases	1,743	1,979
Ear, Nose, and Throat Cases	1,663	1,747
Total Private Patients	3,406	3,726
Total Patients Admitted	6,552	6,790
Operations, Ward Patients — Eye Cases	1,474	1,534
Ear, Nose, and Throat Cases	1,302	1,095
Operations, Private Patients — Eye Cases	1,345	2,070
Ear, Nose, and Throat Cases	1,875	1,601
Total Operations	5,996	6,300

OUT-PATIENT DEPARTMENT

	1952	1953
New Patients — Eye Clinic	4,931	5,823
Ear, Nose, and Throat Clinic	3,264	3,209
Total OPD New Patients	8,195	9,032
Revisits — Eye Clinic	35,403	35,341
Ear, Nose, and Throat Clinic	19,961	17,931
Total OPD Clinical Revisits	55,364	53,272
Visits — Eye Clinic	40,334	41,164
Ear, Nose, and Throat Clinic	23,225	21,140
Total OPD Clinical Visits	63,559	62,304
Emergency Patients Admitted to Hospital	351	234
Patients Admitted to Emergency Ward	5,338	4,539

Comparative Statistics

	1952	1953
Patient Days Care—Wards	23,397	22,639
Private	19,619	22,274
TOTAL PATIENT DAYS CARE	43,016	44,913
Average Number of Patients Treated Daily—Wards	64	62
Private	54	61
TOTAL AVERAGE TREATED DAILY	118	123
Average Number of Days Patients Remain—Wards	7+	7+
Private	5+	6
Beds Available and Percent of Occupancy—Wards	104 62%	104 60%
Private	73 74%	73 82%
TOTAL BEDS AVAILABLE	177	177
Per Capita Cost Per Day—Wards, Routine Care	$17.33	$17.59
Special Services	5.77	5.82
TOTAL COST PER DAY PER WARD PATIENT	$23.10	$23.41
Per Capita Cost Per Day—Semi-Private, Routine Care	$14.82	$15.61
Special Services	6.49	7.60
TOTAL COST PER DAY PER SEMI-PRIVATE PATIENT	$21.31	$23.21
Per Capita Cost Per Day—Private, Routine Care	$20.48	$18.17
Special Services	5.51	5.35
TOTAL COST PER DAY PER PRIVATE PATIENT	$25.99	$23.52
Condition of Ward Patients on Discharge—Died	11	10
Autopsies	36%	70%
Left Against Advice	3	0
Discharged	2,082	3,050
Percentage of "Free Care"—Compiled on Dollar Value, not including Blue Cross:		
House Patients	8.6%	7.2%
Out-Patients	19.1%	25.7%
TOTAL "FREE CARE"	11.0%	10.2%

Report of the Director

The period of a year and three-quarters since our last Annual Report has, in many ways, been the most active in the history of the hospital. More private and semi-private patients than ever before came to us for treatment and surgery. Research during this period has had a major expansion. The renovations of the physical plant of the hospital continued, and many hours have been spent by the administration in planning a new Research Center, renovations of dietary and basement areas, and a small addition in the Out-Patient Department to house the Retina Service.

We are pleased to report that during this expansion period, the hospital showed a small surplus of $8,000 in the ten months' period from January 1952 to October 1952 and $6,500 from October 1952 to October 1953.

Certain trends which have been developing over a period of years seem important enough to mention in this report. As stated above, the number of private and semi-private patients coming to the hospital has increased and, conversely, the number of service cases and Out-Patient Department visits have continued to decline. This trend from service to private patients is noticeable in the great majority of hospitals in Massachusetts and can be at least partially explained by the continued favorable economy of the country as a whole and by the increase in health insurance.

The number of patients with retinal detachment also continues to increase at an accelerated pace. They now represent over 18% of all patient days or, expressed another way, they are about 30% of all eye admissions to the Infirmary. When it is realized that these patients remain in the hospital three weeks, compared to only six days for other patients, and that a large majority of them are considered emergencies who must be admitted immediately, the magnitude of the problem becomes more apparent.

To relieve temporarily the pressure of caring for these patients, we were able to make arrangements with the Massachusetts General Hospital last spring for thirteen beds in a wing on the ninth floor of Baker Memorial Hospital. In these beds, we have been concentrating the majority of our private retinas. It has become a pleasant and efficient unit, and we are most grateful to the MGH for their cooperation. Expansion of the clinical services for retina patients has also been pronounced, and to make more room for the Retina Clinic, plans have been drawn and work is expected to begin shortly on a one story addition which will add about 1,000 square feet of space next to the Eye Clinic. This area should relieve the obvious congestion which now exists.

On the Ear, Nose, and Throat Service, the care of cancer patients has increased markedly in the past few years. There is every indication that in the future our doctors will be undertaking even more of the difficult and major surgery often required by such patients. Visits to the Tumor Clinic, run jointly with the MGH in the Out-Patient Department, also are increasing. This is now one of the larger clinics in the OPD.

NEW FINANCIAL YEAR

Along with most other hospitals in Massachusetts, the Infirmary changed its fiscal year from January 1 to September 31. As the change came in 1952 and no regular report was written for the short ten-month period during the transition, this report covers the period from January 1, 1952 to September 31, 1953.

One of the important developments occurring in this period was the final adoption of uniform accounting by the hospitals in Massachusetts. After many months of work by the Massachusetts Hospital Association, member hospitals filed uniform report forms for the year ending 1952. This change is of major importance, not only because it sets a pattern for more efficient hospital operations in the future, but also because it will serve as a standard vehicle for reimbursement of hospital costs by third parties.

As a direct result of uniform accounting, the Commission on Education of the Massachusetts Hospital Association was able to get a bill through the Massachusetts State Legislature, known as House Bill 2533 which authorizes the payment of full cost for the care of indigent patients who are the direct responsibility of the public agencies. This new and vitally important law will increase the payment to Massachusetts hospitals by approximately $1,000,000 a year when it goes into full effect in January of 1955. In the meantime, public agencies will pay $14.00 per patient day in 1954, instead of $12.00, as in the past. To the Infirmary the new law will eventually mean an increase of about $10,000 a year.

PERSONNEL

The shortage in nursing personnel and, in fact, all personnel, has been even more acute during the last year and is perhaps the most pressing problem facing our hospital today. The nursing administration has been using every possible method to keep the hospital covered and are under constant pressure from day to day to give patients proper care.

The Infirmary was pleased to be included as one of the 10 hospitals participating in a study of the duties of a staff nurse by the Joint Major Project Committee of the Nursing Council and the Society for the Advancement of Management. Basically, it was the desire of the Committee to find the percentage of time a staff nurse in these 10 hospitals spent on her various duties and then determine which of these duties perhaps could be performed by less highly trained lay personnel.

The industrial management techniques used to accumulate this information, called "ratio delay", or "staff nurse logging", were interesting and productive. Over one hundred nurses on the day, evening and night shifts participated. We have already made progress in rearranging duties.

An outgrowth of this study was the development of an eight-day institute on Work Simplification sponsored by the Hospital Council and conducted by Mr. Harold Dunlap, with the generous assistance of the H. P. Hood & Sons Company. Twelve representatives of hospitals in Metropolitan Boston, the Infirmary included, took the course and are now actively engaged in reviewing many procedures in their respective hospitals. Over a period of time it is anticipated improvements in methods can be found which not only will save time and energy but improve service to patients.

Early in the fall, all departments of the hospital, including nursing, were put on a forty-hour week. Because of personnel shortages, this change has been difficult to accomplish at once, but we hope all departments will be working only forty hours each week in the not too distant future.

RESEARCH

In the years since the war, research has become an increasingly important function of the Massachusetts Eye & Ear Infirmary. Through this hospital's affiliation with the Harvard Medical School and close association with the research being carried on at the Massachusetts General Hospital, investigations here into the causes of blindness and deafness are a part of a much larger research effort that would be impossible in an institution operating alone. In this fertile environment, the staff of the Infirmary serve as consultants in ophthalmology and otolaryngology for all units and often collaborate with them in specific projects. With larger funds available from government agencies, the amount allocated to research at the present time represents a sizable percentage of the total hospital budget.

Because of this rapid growth, the Board of Managers recently decided to consolidate the two existing research committees of each service into one combined committee. This new committee will have the responsibility for the over-all policy of the total research being carried on in the hospital. Mr. William H. Claflin, III, representing the Board of Managers, was made Chairman; the chiefs of Services, the Dean of the Medical School, the Director and the staff members active in research are also on the committee. Dr. Robert L. Berg acts as Executive Secretary. The following serve on the Committee:

William H. Claflin, III, *Chairman*
Robert L. Berg, M.D., *Executive Secretary*

George P. Berry, M.D.
David G. Cogan, M.D.
Edwin B. Dunphy, M.D.
Parker Heath, M.D.
Francis S. Hill
George Kelemen, M.D.
Merrill J. King, M.D.
Moses H. Lurie, M.D.
Phillip E. Meltzer, M.D.
Le Roy A. Schall, M.D.
Charles L. Schepens, M.D.
Herman J. Sternstein, M.D.
William Stone, Jr., M.D.
Francis L. Weille, M.D.

In addition to the responsibility for general policies, the Committee will function to relieve the investigators of many administrative burdens relating to the non-scientific aspects of their projects and should also be able to assist them in obtaining research funds. It will be a means of intercommunication between investigators and should stimulate the exchange of ideas among the various groups.

As adequate space for research has been one of the major problems at the Infirmary for some time, the Board of Managers decided last spring to proceed with the planning of three floors for research to be constructed on top of the connecting building in the OPD. Plans, at this writing, are well advanced, and it is anticipated that construction will start some time next spring or summer. These floors will make available approximately 15,000 square feet of useable space for research which is now widely scattered throughout the hospital. It will also release space on the lower floors for expansion of administrative facilities:

In the past, the social implications of blindness and deafness never have been properly appreciated by the public, and far too little has been done to find and remove the causes of such crippling handicaps. Literally millions are expended annually in caring for the blind and the deaf, but pathetically little, until recently, has been given for research into the cause and cure of either. As there are comparatively few eye and ear centers in the country, the Infirmary feels a tremendous responsibility in providing facilities for productive research.

One of the great challenges for research here can be illustrated by the increasing incidence of the comparatively new disease of retrolental fibroplasia, which was first described by the late Dr. Theodore Terry at the Infirmary in 1942. This disease, which occurs primarily in premature babies, has spread so widely that it is now regarded by many to be the principal cause of blindness in' infants.

As an example of the seriousness of this disease, over three hundred of these children have been treated in the Infirmary clinics during the last few years. At the Perkins Institute for the Blind, the first cases of children blinded by retrolental fibroplasia were admitted in the fall of 1945 — 3 of 54 admissions. Since then, the enrollment of such cases has steadily mounted so that last April 78% of the kindergarten class and 34% of the total enrollment were children with retrolental fibroplasia.

The Infirmary has been searching for the cause of this disease since 1942, and at the present time is collaborating with the Boston Lying-In Hospital and Children's Hospital. As many groups throughout the country are now investigating the disease and reporting their findings, it is hoped that the combined efforts of a coordinated, nationwide, research program will prove successful in combatting retrolental fibroplasia in the not too distant future.

This particular research program is not necessarily more important than the other interesting work going on in both services of the hospital, but it serves as an illustration of the importance of research in such crippling diseases as blindness and deafness.

FRANCIS S. HILL,
Director

Department of Ophthalmology

THE Infirmary has experienced another year of expanding activity. The tendency to shrinkage of out-patient material noted in the last report seems to have come to a standstill. This is good news from the standpoint of teaching, since the dropping off in the clinic census was causing some concern.

The fresh painting and new decorating of the OPD are greatly appreciated by the staff. Certain changes have been made in the method of handling irrigators and surgical instruments to insure more complete sterilization. Facilities for performing gonioscopic examinations have been installed. Miss Oveta Allen continues as Chief Nurse of this busy department.

The Orthoptic Clinic, with Miss Ann Stromberg in charge, has been enlarged to make room for the inclusion of private cases, which may be referred by various staff members. Approximately 50 private patients a month have been seen since the opening of this facility in June. During the year a total of 6,184 patient visits were recorded, slightly more than last year. This department continues to train two Simmons College students a year as orthoptic technicians.

The Refraction Department accounted for 8,095 refractions, slightly less than last year. Approximately 52% were done by the residents, the remainder by paid refractionists. Dr. Albert Sloane is continuing his weekly lectures to the residents, many of which are published in the American Journal of Ophthalmology. During the year a number of patients with subnormal vision have been checked with telescopic lenses and other magnifying devices which have been purchased for general use in the refraction room.

The Perimetry Room, under Dr. Garrett Sullivan's supervision, performed 842 field examinations, a definite falling off from the previous figure. The explanation for this may lie in the fact that the Neurological Department refers far fewer patients than in the past, since all their fields are now done in their own department.

GROWTH OF RETINA SERVICE

The growth of the Retina Service has precipitated acute problems of bed space; 563 new patients were examined and 431 operations were performed during the year, representing a large increase from last year's figures. Additional space has been obtained in the Baker Memorial Hospital to house 13 private patients. These patients are operated upon at the Infirmary and are then transferred to Baker for convalescence. The system is a temporary one but so far has worked out very well. Dr. Schepens is now being assisted by Dr. Okamura, who works on a full-time basis. Many ophthalmologists from other cities and countries visit this service and it is now planned to offer a fellowship for a six months' training period in the diagnostic and surgical techniques of handling detached retinal cases.

The Boston Eye Bank will be covered by a separate report. However, it is important to mention here the great help that this activity has given to the research departments of the hospital in supplying eyes for important investigative purposes, as well as fulfilling its primary function as a collector of eyes for corneal transplantation. A total of fifty-five hospitals throughout New England are now affiliated in the program. Miss Marilyn Myers has replaced Miss Phyllis Scott as the Executive Secretary and Dr. Garrett Sullivan continues as the Director.

Dr. Parker Heath reports that 245 whole eyes were processed in the Eye Pathology Laboratory during the year and 320 biopsies were completed. Dr. Heath is continuing his weekly pathology symposia which are attended by many outside doctors as well as by our own residents. The clinical pathological conference which he conducts each month has become a feature of our staff clinical meetings. The laboratory has had as a Fellow in Ophthalmic Pathology, Dr. Barbara Wiard, who has contributed a great deal at these conferences. A considerable number of fundus photographs have been taken for the staff of the Infirmary and the Massachusetts General Hospital.

An important event of the past year has been the decision to go ahead with the construction of a new research unit. After discarding several other plans, it was decided to build this Research Center on top of the present combined out-patient building. It will consist of three floors, each containing a total of approximately 5,000 square feet of useable space. Even this liberal addition does not give all the space necessary for the various research activities of the Infirmary but it is the best that can be obtained at present.

Another piece of vitally needed construction is the contemplated enlargement of the quarters for the Retina Service and Harvard teaching room. This is to be accomplished by extending the present location out over the roof of the OPD admitting area.

IMPORTANT RESEARCH IN PROGRESS

Research at the Infirmary has always been one of its prominent functions. It was given impetus with the founding of the Howe Laboratory a quarter of a century ago. The report of this famous laboratory will be made by its director, Dr. David Cogan, in another section, but it should be noted here that the Infirmary has greatly benefitted by having such a productive group in close association.

The Retina Foundation, founded by Dr. Schepens three years ago, has begun to publish the results of its investigations. A new laboratory for the determination of radio-active carbon in small amounts of tissue samples has been organized.

Dr. Marie A. Jakus has continued her investigation of the fine structure of the rat cornea as seen in thin sections with the electronmicroscope.

Dr. Fritz Wachendorf has been investigating methods from the mathematical computation of optimum design for new systems. Some of this work is performed in collaboration with the Digital Computer Laboratory of the Massachusetts Institute of Technology.

In addition to the Foundation's regular staff, there are several other research workers from this country and Europe, who are assisting Dr. Endre A. Balazs in investigating the biological significance of hyaluronic acid and the effects of ultra-violet irradiation upon the structure of the vitreous body. Also a study has been started of the properties of gels in relation to the vitreous body of Dr. Lazzlo Varga.

Dr. L. Varga has started a study of the properties of gels in relation to the vitreous body.

Dr. Parker Heath in the Eye Pathology Laboratory is pursuing his studies on iris tumors, tumors of the lacrimal gland, and the retinopathy of prematurity.

Dr. Merril King and Dr. Leona Zacharias are working on the problem of retrolental fibroplasia, in collaboration with the pediatricians at the Boston Lying-In Hospital and the Children's Hospital. This work is made possible by the generosity of the Foundation for Vision.

Dr. William Stone is continuing his work on the plastic cornea and the improvement of plastic integrated implants.

Dr. Henry Allen and Miss Anita Mangiaracine have been investigating the effectiveness of sterilization of surgical instruments. Dr. Allen has also studied the permeability of the lens capsule to certain bacterial toxins.

Dr. Edwin B. Dunphy and Dr. Knud Dreisler have been working with radioactive phosphorus in the diagnosis of intaocular tumors, in collaboration with Dr. William Sweet of the Massachusetts General Hospital.

Edwin B. Dunphy, M.D.,
Chief of Ophthalmology

Department of Otolaryngology

In my last Annual Report, I spoke of the shortage of residents in many of the special fields of medicine and surgery due to the demands of the military services and to economic factors. Previous to World War II, most of the young men in residency training were unmarried. Today, the residents are an older group, many of whom have had military service and are now married with families. In order to meet family obligations, a large percentage of the graduating classes are planning to enter general practice after their internship.

In order to meet the requirements of the American College of Surgeons, the Council on Medical Education of the American Medical Association, and the American Board of Otolaryngology, the period of training in otolaryngology has been increased to three years. In a hospital such as the Massachusetts Eye and Ear Infirmary, where residents are given only room, board, laundry, and a stipend of approximately $48 a month, while Government and State universities offer salaries as high as $300 a month, the competition for qualified residents is very keen.

We meet this competition by the quality of our training. Evidence of the standard of our training is the nationalities of our applicants for residencies. At present our resident staff includes physicians from Brazil, Italy, Syria, Iraq, and Canada; under consideration are well-recommended young men from Thailand, Japan, South Africa, and India.

The lessening of the military tension due to the armistice in Korea and the slackening of the military services' demand for medical personnel has increased the number of applicants from the United States. Appointments to the resident staff have been completed through 1954, so the Infirmary is in an enviable position, although the acute shortage of residents still persists in most institutions.

When conditions permit, a recommendation will be made to the Board of Managers that our resident staff be increased from nine to twelve. Due to the rapid turnover of patients and to the volume of work, the burdens of our resident staff would be more evenly distributed by an increase of personnel. Then, too, it is our desire to increase the scope of resident training. A short time ago an academic year in the basic sciences was made one of the requirements for an appointment. It was our feeling at the time, and it still is, that the basic sciences should be taught during the residency.

If and when the Board of Managers approves of this recommendation and our resident staff is increased to twelve, then we shall reorganize our services to include three months in the basic sciences to be given at the Harvard Medical School, three months of neurosurgery at the Massachusetts General Hospital, and an affiliation of three months in otolaryngology at the Children's Hospital. This reorganization of the curriculum will give a more thorough training and should be so attractive that the Infirmary should never again suffer from the lack of residents.

ACTIVE EDUCATIONAL PROGRAM

Our educational program for residents is an active one. Monday evenings are spent at the Harvard Medical School with Drs. Meltzer, Weille, and Reed, where the residents are instructed in temporal bone anatomy and surgery. These sessions often last until after midnight. On Wednesday a Clinical Conference is held between 11:30 and 12:30 A.M. At this time, interesting cases seen at the Infirmary during the week are discussed both as to diagnosis and treatment. This meeting is open to all interested physicians. A free discussion is invited and welcomed. Attendance at these meetings averages over 100 persons.

On Wednesday afternoon Dr. Philip Mysel meets with the residents for instruction and discussion of problems in otolaryngology and the related fields of medicine and surgery. By cooperation with the training programs of other departments, Dr. Mysel is able to supplement his instruction by invited guests who present talks on their own subjects or special interests. On Thursday evenings at the Harvard Medical School, a systematic course of lectures and demonstrations on the anatomy of our specialty is given by Dr. John Richardson assisted by other members of the staff.

We have invited the residents and staffs of other institutions in our community to attend our Thursday evening meetings. The regular and faithful attendance at these meetings justifies our feeling that we have something to offer.

RESEARCH AND LABORATORIES

Dr. Herman J. Sternstein has continued his pioneer work on "Atrophic Rhinitis". This condition is one which is usually shunned by practicing otolaryngologists due to the distressing symptoms and hopelessness of the disease. By sterilization of the nasal cavity and by the use of nasal-dilating drugs, Dr. Sternstein is, for the first time, giving new hope to the victims afflicted with this disease.

Dr. Francis L. Weille, working in cooperation with the Department of Allergy, has been studying the blood supply of the cochlea. Under high magnification he is able to study and also to photograph the vascular changes in the via vascularis due to disease. This is also pioneer study of the highest caliber and scientific interest which may solve many of the problems of vascular changes in the cochlea.

Dr. George Kelemen is continuing his work on the temporal bone. He is now studying the effects of irradiation on the internal ear and also the prenatal influence of german measles on the organ of Corti in the early period of development. His findings on "Congenital Laryngeal Stridor" have been completed and published.

In the Virus Research Laboratory, Dr. Robert S. Gohd is working with his studies on "The Common Cold", and has expanded it in an attempt to isolate the virus in papilloma of the larynx.

Dr. Moses H. Lurie is continuing with his investigation of the toxic effects of the antibiotics on the internal ear.

Dr. Werner Mueller is successfully and competently carrying on the work in the Mosher Laboratory. During the first nine months of this year more anatomical material has passed through his laboratory than in any previous year of the Infirmary's activities. His collection of slides of pathological lesions of the upper respiratory tract, used for resident training and student teaching, are unsurpassed.

Miss Anita Mangiaracine, bacteriologist for the Infirmary, has continued to render her usual excellent services to the hospital. The accuracy of her reports and her conscientious application to her work has made her an indispensable member of the Infirmary.

In past reports we have mentioned the work of Mrs. Paul A. Doehler in teaching esophageal speech to laryngectomized patients. Mrs. Doehler is receiving national recognition as one of the outstanding teachers in this field, and her recent booklet on "Esophageal Speech" has been the first of its kind ever to be printed. This was in cooperation with the American Cancer Society, (Massachusetts Division).

STAFF ACTIVITIES

As evidence of the leadership of the Massachusetts Eye and Ear Infirmary in otolaryngology, it may be cited that of the members of the American Board of Otolaryngology, ten have been Infirmary or Harvard Medical School trained.

In our national societies, Dr. Frederick T. Hill (1916) is president of the American Otological Society and Dr. Staunton Wishart (1922) is secretary. Dr. Hill is also president of the American Board of Otolaryngology.

Dr. LeRoy A. Schall, Chief of Otology and Laryngology at the Massachusetts Eye and Ear Infirmary, is president of the American Laryngological, Otological, and Rhinological Society and Dr. Kenneth M. Day (1924) is president-elect.

Members of our staff have been much sought after to participate in national as well as local scientific programs. Publications will be found in the section of this report listing such activities.

LeRoy A. Schall, M.D.,
Chief of Otolaryngology

X-Ray Department

The work in the Department continues in much the usual manner, types of cases not having varied from those in previous years.

The new stratograph machine, purchased last January, for doing laminagrams of the larynx, is proving of value in showing us at what depth a growth or tumor is located. A joint paper with Dr. LeRoy A. Schall and Dr. Paul M. G. St. Aubin on "The Laminagram as an Aid in the Diagnosis of Diseases of the Larynx" was presented at the Laryngological Society meeting in New Orleans, Louisiana.

Instruction courses were given at the Annual Meeting of the American Roetgen Ray Society in Cincinnati, Ohio, and at the Spring Congress of the Gill Memorial Eye, Ear and Throat Hospital in Roanoke, Virginia.

The continual flow of students and visitors from far and near adds both interest and stimulation to our work, our visitors this year representing such disparate homelands as Sweden, South America, Thailand, Switzerland and Canada. The excellent work done by the Department personnel has also been a constant source of satisfaction and appreciation.

Statistical Report

Thymus	543	Spine		38
Mastoids	848	Tempero-mandibular Joints		22
Sinuses	1,601	Naso-pharynx		244
Teeth	139	Orbits and Optic Canals		90
Foreign Body eye and Localization	175	Laminagram		86
Chest	1,647	Treatment		104
Esophagus and Barium Swallow	233	Miscellaneous		59
Skull	163	Number of Examinations	6,710	
Jaws	101	Number of Patients	5,842	
Nose	131	Bouginage:		
Lipiodol Injection	38	Number of Treatments	267	
Petrous	60	Number of Patients	56	
Abdomen	33	Total Treatments		6,967
Lateral Neck	345	Total Patients		5,898

A. S. MacMillan, M.D.,
Roentgenologist

Out-Patient Department

Comparison of Attendance Figures:

	Eye Clinics	Ear, Nose & Throat	Total Infirmary	Total MGH
1951-52	40,324	23,215	63,539	115,054
1952-53	41,164—2%	21,140—9%	62,304—2%	114,283—.6½%

Clinic attendance continues to decline, as shown by the table above. Trends in attendance figures have varied not only as between clinics in the Infirmary but also as between the Infirmary clinics and those of the Massachusetts General Hospital. The figures are of interest, but there seems no ready explanation for the variations.

To facilitate the handling of emergency patients, admitting procedures were changed at the start of this fiscal year. All patients, except those with grave emergencies, who apply for care to the Infirmary front desk between the hours of 8:30 A.M. and 4:30 P.M., are sent to the regular Out-Patient admitting area. On the other hand, patients with emergency or urgent conditions are now sent immediately and directly to the clinic — usually the Eye Clinic, and are seen by the OPD admitting officer after they have had treatment. This arrangement, which has proved most satisfactory to both patients and personnel, has been implemented by Miss Ruth Stratiff, a former Infirmary employee who was engaged for this service.

INCREASE IN WELFARE PAYMENTS

The Department of Public Welfare of the Commonwealth of Massachusetts authorized an increase in payments for clinic visits from $1.00 to $2.00, as of November 1, 1952. This increase is for clients receiving Old Age Assistance, Aid to Dependent Children and Disability Assistance.

On January 1, 1953, the Welfare Department instituted a direct payment procedure. This makes it possible for the OPD to bill the respective Welfare Offices directly for the care of their clients in the above-named categories, and includes charges for ancillary services at the rates established by the State Welfare Department.

Previously such payments were made to the patients, who, unfortunately, did not always transmit the money to the hospital. The increase in clinic visit payments plus the direct payment arrangement has added substantially to the income of the clinics.

PRIVATE ORTHOPTIC CLINIC

To meet a growing demand in the community, a private Orthoptic Clinic was established on June 15. Children with crossed eyes coming from families whose financial status is above the clinic limit, may be sent to this clinic for orthoptic training.

The new private Orthoptic Clinic is held concurrently with the regular OPD orthoptic clinic, in additional space that has been found in the same area. At present, private orthoptic patients may be referred only by members of the Infirmary Eye Staff, but it is probable that this service will be extended to other ophthalmologists in the community at a later date.

Patients are seen by appointment each week-day from 9:00 A.M. to 5:00 P.M. and on Saturday mornings. The charge is $5.00 per clinic visit but if frequent visits are necessary, a treatment card of five visits may be bought for $17.50. Miss Mary Donahue, who has been a part-time worker in the regular Orthoptic Clinic, has been engaged full-time to assist Miss Ann Stromberg, Chief Orthoptic Technician, to take care of the increased patient load. Miss Caroline MacMillan is the full-time secretary in charge of the appointment system and of sending reports to referring physicians.

RELOCATION AND REDECORATION

In order to give the Orthoptic Clinic the additional space needed for private patients, the Social Service Department consented to move some workers from the room on the first floor to new quarters in the space between the Winthrop Foundation and the Ear, Nose and Throat Clinic. Mrs. Paul Doehler's classes in Esophageal Voice also moved into an office in this same general location at about this same time.

As part of an overall plan to make the clinics more attractive, efficient, and inviting, in September the Eye Clinic received a coat of flat white paint on the ceiling plus some new light fixtures, to make much-needed improvements in the lighting in this area. Similar redecoration is planned for the Ear, Nose and Throat Clinic in the near future. Other future plans for the clinics include some new and more comfortable furniture to allow for a more inviting seating arrangement, and also new flooring in the admitting and waiting areas.

FORTY-HOUR WEEK AND PERSONNEL CHANGES

On August 31, a 40-hour week for nurses was instituted in the OPD. This new schedule plus some badly-needed additional coverage during the peak period in the morning, necessitated the employment of one additional graduate nurse.

Last October, Miss Dora Capetti resigned as staff nurse in the ENT clinic to take advanced studies and was replaced by Mrs. Ada Giriunas. Early this October, Miss Enid Whyte was replaced as staff nurse in the Eye Clinic by Mrs. Florence MacLeod. Mrs. Helen Batten was employed as the extra graduate nurse needed to implement the 40-hour week schedule in both of the Infirmary clinics.

MARGARET MEENAN, R.N.,
Administrative Assistant

Nursing Department

IN all the changes and complications that have taken place during the past year in the Nursing Department, the acute shortage of nurses remains the basic problem. Because of this mounting nursing shortage, the last few years have been the most difficult period of my 26 years of service at the Infirmary.

Newspaper advertising has been tried with no marked results. A special letter of appeal for nurses was also sent to 93 New England newspapers, 77 former resident doctors, and 12 Boston Insurance companies with no response.

INDUSTRIAL NURSES' CONFERENCES

As an outgrowth of circularizing the group of industrial nurses in Greater Boston, there has been started a series of conferences on the ways in which the hospital and industrial nurses can cooperate to save eyesight, which are unique in this area. There have been three such programs so far, arranged by Miss Mary E. Shepard, R.N., Director of Nursing Education, and addressed by different members of the hospital's eye staff. The conferences have been well attended by the graduate nurses employed by industries, banks, and insurance companies.

It was in February, 1952, that Miss Shepard, B.S. in Education at Boston University and M.A. at Columbia University, was appointed Educational Director. Her training and experience make her a great addition to our staff and she has already revised the ward procedure books, nursing outlines and daily routine nursing treatments on the wards. Under her supervision, a new brochure and application form for the three months' graduate course in eye, ear, nose, and throat nursing, has been printed and mailed to over 400 schools of nursing in New England and other States.

In September, Miss Shepard represented the hospital at a workshop on work simplification, sponsored by the Hospital Council of Boston. She is now conducting a similar program for Infirmary personnel.

Early in June, headquarters for our Education Director was moved from the Classroom to an office of her own next door on the third floor. Teaching facilities also have been greatly improved by the acquisition of a projectoscope and screen for the Classroom. Already, many interesting films for visual teaching have been shown.

A listing of some of the more important changes in personnel during the year give some indication of the nursing situation. Miss Katherine Hogan resigned September 8, 1952, as Instructor and Supervisor, to enter Duke University, North Carolina, for further study. She had done an excellent job and was most popular at the hospital and we were glad to welcome her back for summer relief in the Nursing Office.

Mrs. Althea Brady, MGH 1927, and Miss Nancy Caswell, B.S. from the University of Vermont School of Nursing, were appointed clinical instructors and supervisors. Mrs. Brady served six months and then resigned to enroll at Boston University for further study. Miss Caswell was with us a year before she resigned to enter the University of Denver to work for her Master of Arts degree in Nursing Education. Miss Judith Stocks, B.S., from Simmons 1952, succeeded Miss Caswell.

Other resignations during the year took Miss Dorothy Ghisellini from her position as Head Nurse, Women's Ward, and Ward Teaching Supervisor, to Washington, D. C., to become a nurse in a private family there. Miss Theresa McLaughlin, staff nurse on the fifth floor, and Miss Kathryn Bradbury, assistant Head Nurse, second floor, left us to enter the Navy Nurse Corps, and Miss Virginia Day, staff nurse, fifth floor, and Miss Jean Youngberg, went to work for the airlines. There were many other resignations among the head nurse and operating room nurse groups, some for family responsibilities and three to get married.

DEPARTMENT CHANGES

For the past year, the Nursing Department has had a full-time secretary. With the various revisions, questionnaires and so on, her time has been well occupied. A work simplification project might start right here in this area, for we are handicapped by lack of space and a good inter-office communication system.

For the past two years, the affiliating student nurses have changed with a new group coming to us every 28 days. The first two weeks are filled with demonstrations, supervision and class work. Each year now, one or two schools terminate this affiliation. St. John's Hospital in Lowell sent its last student in June this year, and Melrose Hospital has just sent the last two to us this October. The Burbank Hospital in Fitchburg will end its affiliation at the end of the calendar year.

We realize that schools teaching the basic courses in nursing have to crowd a great deal of experience into the three-year period, but, at the same time, we feel that a four-week affiliation in eye, ear, nose and throat specialties would be most valuable to all nursing schools. The following comparative table shows a net gain because of the new affiliation with the Boston College School of Nursing:

Affiliates	*1952*	*1953*
Massachusetts General Hospital	110	102
Quincy City Hospital	32	15
Burbank Hospital	24	24
Melrose Hospital	21	21
St. John's Hospital	13	13
Boston College School of Nursing	0	26
Three months' Graduate Course	8	6

Frequent nurse visitors from all over this country and beyond come for observation and are most welcome. Typical visitors were the Instructor in the Department of Surgical Nursing, University of Pittsburgh, Pennsylvania, the Director of Health from Gaulledet College, Washington, D. C., whose special interest was the hard-of-hearing patient, and the Matron of Moorsfield Westminster and Central Eye Hospital, London, who visited us last summer.

Last summer also, a Sister of Charity who was teaching in a Cambridge convent, asked to spend a month with us for observation and experience in the care of eye patients. She wanted this experience because she was going to Egypt for missionary work. With the consent of her Mother Superior, the Sister lived in the Nurses' Residence during the week and observed on the wards and in the clinics. She was most pleased by the cooperation she received from our Department and from the staff doctors.

TURNOVER IN HOSPITAL AIDES

Miss Pauline Abbott, Instructor and Supervisor of Hospital Aides, has done an outstanding job with this ever-changing group. A classroom was assigned to her in the Gardner Building and she has spent many hours getting the room properly equipped and giving the aides the necessary instruction and supervision.

Our quota of Hospital Aides has increased from 35 to 40. They have recently been given new grey uniforms with white collars, to replace the brown chambray, and 22 lockers with individual keys have been purchased for the aides' dressing room. During the past year, 61 applicants have been interviewed, enrolled, issued uniforms, instructed and supervised on the wards, which in itself represents hours of work by Mrs. Abbott and Miss Blaisdell.

In September of this year all the professional group went on a 40-hour week with salary increases. Non-professional personnel had already adopted this shorter work week which is now the general practice in hospitals in this area. It was hoped that this change would bring us more nursing recruits, but up to the current time, it has only added more headaches in trying to re-schedule our greatly under-staffed Department.

The Nurses' Residence has seen quite a few improvements during the year, the most important being an elevator, which certainly makes the upper floors more attractive as living quarters. Also a new kitchen on the third floor and the renovation of the ground floor kitchen add to the nurses' comfort. Thanks to the Ladies Visiting Committee, the big living room has handsome new slip covers, the small sitting room a new rug, and there are plenty of chairs for the newly designated television room, formerly called the library.

Dorothy M. Tarbox, R.N.,
Superintendent of Nurses

Volunteer Department

This report finds the Volunteer Department in its third year and now a very integral part of the hospital.

The three major services of the Department are, first, the feeding program which averages 12 volunteers. Feeders are of great importance in the Infirmary where so many of our patients have both eyes bandaged after an operation. Second, there is the clinic receptionists' program which keeps a steady number of 16 volunteers. And finally, the nursery has a supervisory group which, through the fall and winter, we try to keep supplied with 20 people a week, two for the morning and two for the afternoon.

In addition to the above services, the Department has supplied volunteers for the admitting office, the secretarial department, Social Service and Housekeeping departments. When a call is received in this Department for the services of a volunteer, we make every effort to meet the request even on short notice. In doing this, we rely greatly on the Volunteer Service Bureau which has supplied us with 20 of our present 56 volunteers. Another source of volunteers is former patients who come back wishing to help others as they were once helped.

NURSERY PROGRAM

In the two previous years, we worked closely with Wheelock students as nursery supervisors in the playroom. This year we have expanded our nursery program to include more than just one source. Present schools now supplying us with volunteers are Radcliffe, Garland, Emmanuel, Simmons, and Perry Normal. The nursery work that the Perry and Garland students are doing is a part of their school program. Our Occupational Therapist, who is their clinical instructor, sends reports to the colleges on the ability of the student as a nursery supervisor.

VOLUNTEER RECOGNITION

Cherry red, the national color for volunteer uniforms, was chosen for the eight smocks that the Ladies' Visiting Committee gave to the Volunteer Department. These smocks were originally purchased only for the feeders, but in order that all volunteers should be recognized as such, this fall smocks were supplied for all volunteers.

Our tea to honor all the volunteers was held in the Surgeons Parlor on May 12, National Hospital Day. High point of the afternoon was the awarding of seven American Hospital Association pins to those of our volunteers who had completed 100 hours in a year's time.

Particular mention should be made here of the steady corps who give so generously and faithfully of their time. Our volunteer program could not survive if it were not for this group that the Director knows she can depend upon and call in case of emergency.

There seems to be no solution to the problem of volunteers who come in full of enthusiasm and then leave within a period of weeks. Sometimes the reasons for leaving are unavoidable, particularly in the case of family women. But it is difficult for the volunteer to realize that the small routine job she has been given must be done, and for this reason she leaves feeling she is not needed. Therefore, it is important that hospital personnel make the volunteer feel at home and let her know she is essential.

RECORD OF SERVICE

At present count, there are 56 volunteers in the active files of the Volunteer Department. These volunteers cover all walks of life — the former patient, the young matron, the Junior League member, the housewife with grown children, the college student and the career woman.

In the calendar year of 1952, there was a total of 5062 hours given by the Infirmary volunteers and up to September of 1953, there have been 3990 hours given.

A volunteer has much to offer the hospital — her free time and the extra smile or word of encouragement that the paid worker often does not have time for, but that means so much to the patient. The hospital also has something to offer the volunteer and that is the satisfaction which comes from doing good for others.

Marilyn G. Myers,
Direct of Volunteers

VOLUNTEERS WHO RECEIVED 100-HOUR PINS

Miss Judith Tunnell
Eye Bank — 241 hours, 35 minutes

Miss Sandra Strotz
Social Service Helper — 218 hours, 30 minutes

Mrs. Marguerite Chase
Clinic Receptionist — 149 hours, 5 minutes

Miss Victoria Piekarski
Clinic Receptionist — 137 hours, 40 minutes

Miss Rose Burnham
Clinic Receptionist — 129 hours, 40 minutes

Miss Mary Bush
Feeder — 115 hours, 15 minutes

Mrs. Irma Ascher
Clinic Receptionist — 100 hours

Social Service Department

During the last year and a half the Social Service Department has given much thought and concerted effort toward improving its service to patients. Specifically, we have reviewed our work from the three angles of our own contact with the patient, of the service contributed by other departments, and of the recommendations and treatment by the doctors. The means of working toward thus scrutinizing our endeavors have been (1) to re-institute regular Department conferences with preparation of case material for study of our methods; (2) to broaden our knowledge of the patients' whole situation through discussion and cooperation with other departments in the handling of patients' problems; and (3) to ask for consultation, where possible, with the doctors referring patients, toward our common understanding for the patients' good.

As a group concerned with the meaning of human behavior and an endeavor to help people adjust to real situations, one of our primary interests lies in any effort to obtain psychiatric assistance for the patient where necessary. The trend of present day thinking is toward the recognition of the strong influence of psychological factors during illness.

For patients having eye and ear disorders, there may well be so severe a psychological disturbance induced by the threat of loss of sight or hearing as to need psychiatric evaluation and help. In our Department, we meet the patients who are greatly helped by the present arrangement of psychiatric consultation for evaluating their reactions, but there are more patients, especially children, than can be served by the present clinic staff. Therefore, the question reoccurs as to whether there is a sufficient need for the services of a psychiatrist to justify a part-time position on the staff.

A change often considered in the past by this Department has now come to the proper time for accomplishment, namely relinquishing to the Out-Patient Department Administration the follow-up of patients who have glaucoma. This is a system whereby a check is made on patients having glaucoma so that they will not lose treatment essential to their condition by neglecting or completely foregoing return appointments in the clinic.

For many years this has been the responsibility of Social Service, but with the re-defining of the use of specialties, it should suitably be the responsibility of secretarial service under the OPD Administration. It has been proved in a similar situation that the close working connection between the secretary and the social worker has not diminished the service to and protection of the patient, even though under separate administrations.

On the Ear Service, the majority of referrals for assistance for rehabilitation continues to come from the Out-Patient Department, the larger numbers being adults asking for help to get hearing aids, and children for whom lip reading and auditory training is arranged. As many patients come from the rural areas of New England, the finding of resources which are adequate, convenient, and not costly for carrying out the various recommended training programs becomes a major endeavor. The largest single group of our patients referred on this service were over 65 years of age. Fortunately, material on geriatrics, with special emphasis on the psychological phase, is accumulating.

In the Tumor Section the extra demands for financial help, with the consequent request for more funds from the American Cancer Society, indicate active service given by the social worker. With a large proportion of the patients coming from outside greater Boston, the arranging of their transportation for daily X-Ray treatment and other care often presents difficulties. However, the greatest need, always, is understanding the meaning of their illness both for the patients who are so seriously ill, and for their families who are standing by through a distressing and often prolonged period.

Work with the group in the Winthrop Foundation has been rewarding. In this section, all children with any significant hearing loss are continuing to be referred to Social Service at the first visit. As these partially and profoundly deaf children present many social and emotional problems, the social worker gives time to talking with the parents so that they may bring out their questions and anxieties concerning the handicap of their children.

On the Eye Service, the hope for a regular plan for meeting with the doctors on ward service still holds our keenest interest in our efforts toward better service to the patients, and we are looking with special emphasis at those spots where the resident is already meeting regularly with the social worker for the planning of patients' care. Such established meetings would bring together, as expeditiously as possible, whatever data the doctors wish to refer to Social Service on new patients, while also ascertaining social information on patients already referred.

The Department has been busy teaching, giving lectures, taking courses, and serving on committees. From January 1, 1952 to May 1952 we had two students from Simmons College School of Social Work under supervision. From October 1952 to May 1953, we had one student from Boston College School of Social Work and one student from Simmons.

Lectures to the student nurses continue every month. In addition, Miss Madeline Shipsey, Casework Supervisor, gave two lectures on the social problems of an eye service to the Harvard graduate students in ophthalmology, and one on the problems of deaf children to the graduate students at the Harvard School of Public Health. Mrs. Ruth Adair, Caseworker in the Tumor Section, has given four lectures to the graduate students in otolaryngology concerning tumor patients. Miss Mary Love gave a lecture on the "Social Problems on an Eye Service" to the nurses at the Peter Bent Brigham Hospital and to the five year nursing staff at the Massachusetts General Hospital.

Miss Shipsey presented a paper on "Social Aspects of Deafness in Children" at the annual convention of the Massachusetts Speech and Hearing Association, and at a meeting for public school teachers sponsored by the Massachusetts Eye and Ear Infirmary, and discussed a paper on "Problems on Supervision" at the National Conference of Social Work in Chicago in the spring of 1952. She also took part in a panel discussion on the "Resources for the Blind" which was given for parents of preschool blind children at Perkins Institution for the Blind in the spring of 1953.

For the year 1952, patients receiving casework service numbered 2268. On the glaucoma follow-up, 1515 patients were seen, of which 305 received casework. Thus, the total number of patients served by the Department, both for casework service and follow-up, was 3468. For the first nine months of 1953, patients receiving casework service numbered

1885. On the glaucoma follow-up, 1512 patients were seen, of which 306 received casework. Thus, the total number of patients served by the Department both in casework and follow-up, was 3091. This is an increase over the same number of months in the year 1952.

The financial report of the Department is as follows: The total expenditures for the year 1952 were $12,636.07. For the first nine months of 1953, they were $8,297.81. These amounts represent charges for hearing aids and ear molds, glasses, transportation, prostheses, nursing home care, dentures, and dental care, plus seventeen other items. Receipts to cover these expenditures came from refunds from patients, Social Service fund grants, refunds from agencies, sale of old gold, and Social Service funds on hand.

The funds allotted by the Hospital Administration from the Greater Boston Red Feather Fund, as well as an increased amount from the Permanent Charity Fund, have been much appreciated. We continue to be grateful for the use of funds from New Eyes for the Needy, Inc., of Short Hills, New Jersey; for a gift from an interested (anonymous) donor; for help with transportation expenses for blind children from the Boston Alumnae Chapter of Delta Gamma; and for a much needed grant from the American Cancer Society. Appeals for needs of individual patients have been generously met by the Lend-A-Hand Society, the Frederic E. Weber Charities, Chelsea Lodge of Elks, and Boston Aid to the Blind. From the Lotta Wright Crabtree Estate has come a Christmas contribution to cover cards and small gifts. Several gifts from the Ladies' Visiting Committee have enabled the Department members to broaden interests through educational offerings and also have helped to provide extensive tutoring to a blind child.

In closing, the Director wishes to express appreciation to the Advisory Committee for the interest and support they have given in Department matters.

ISABEL WHITING,
Director, Social Service

Occupational Therapy Department

THE overall program of the Occupational Therapy Department has changed within the past year. Special attention is today directed toward functional activity with Retina patients, who represent the larger percentage of the ophthalmic group and undergo prolonged hospitalization. Therapists now treat patients on the private and semi-private floors, in addition to the ward groups. With accommodations for Retina patients extending into Baker 9, the Department has found the need for expansion. The new working area on this floor provides shelves and closet space for materials, making possible a higher degree of efficiency.

The shop program continues for the otolaryngological and ophthalmic patients. The Ladies Visiting Committee has generously donated a cabinet table which is extremely important in carrying out a more effective working area for ophthalmic patients with eye bandages. The cabinet helps patients keep their supplies and wheelchairs from becoming entangled with those of the patient beside them, and it has increased the work group accommodations to 15 patients.

The primary goal of the Occupational Therapy Department is to provide the patients with an immediate and positive program of adjustment to disability while in the hospital. It is a program that can be taken home with the patient upon recovery, for the tempo of progress is geared to the individual and his readiness for it. A variety of crafts, talking books, radios, and recreational activities is used as a treatment medium. With the increase of referrals, cooperation between Social Service and Occupational Therapy is helpful in maintaining physical-mental balance for the patient.

During the year, there were 826 patients referred to Occupational Therapy and 4,497 treatments given. In cooperation with the Director of Volunteers, the department trained 199 volunteers and students to work in the nursery. The nursery trainees spend their first few days in observation of the hospitalized child in the playroom. If the students are here for a semester, they have one month of constant supervision to cover all age levels found in the nursery group.

After this indoctrination period, the trainees must plan the next three months of the semester by themselves, with the approval of the therapist in charge. At the end of their training, the students submit a report which includes all the materials used, projects found most successful for the different ages, and suggestions for projects that could be utilized with the children.

The Boston School of Occupational Therapy, which is a part of Tufts College, assigned four students to this Department for an eight-week training period. The medical lectures were scheduled with the student nursing staff. For the purpose of helping the therapist understand the disability with which she is working and to make the media simple to teach patients, students wore eye coverings during all demonstrations of treatment media.

During the year, this Department supplied holiday favors for all patients. At Christmas time, we cooperated with other departments in making favors, decorating, party planning, and adding a festive touch to the holiday. During this holiday season, the Ladies Visiting Committee gave beautiful baskets of fruit, gifts for the ward patients, and assistance in the decorating. These Christmas gifts were in some cases the only ones patients received.

Books, magazines, and Braille books were supplied by the Department upon request from adult patients, and 181 talking books have been circulated to the ophthalmic patients. Children's books are available at all times in the nursery.

In February of 1952, Mrs. Patricia Huddleston, OTR, replaced Miss Alice L. Hogan, OTR, as Director of the Department. The increase in the number of patients necessitated the help of an assistant. This need was fulfilled September 1, 1953, by Miss Rosalie Wilkes Rankin, OTR, a graduate of Tufts College.

PATRICIA HUDDLESTON, OTR,
Director, Occupational Therapy

Personnel Department

IT has been difficult to secure all types of personnel because of a highly competitive labor market. We hope next year the situation may be somewhat eased.

Our intensive recruiting has brought in a considerable number of applicants. However, the vacancies created by turnover have exceeded the number of people obtainable.

Our labor sources have included high schools, colleges, divinity schools, medical schools, public and private employment agencies, agencies for the handicapped, displaced persons and veterans bureaus. This year we have started again to use conscientious objectors and have, for the first time, employed Navy Corpsmen part-time on the wards. A good many people have come to us in response to advertisements in newspapers. It has been necessary to increase our advertising budget considerably because of the favorable response to this medium of recruitment. Also we have used radio spot announcements.

The annual salary survey showed that salaries paid our clerical workers were not greatly out of line with those in the community. On less skilled jobs, however, our salaries do not meet the market rate.

Our greatest change was at the end of the fiscal year when the 40-hour week was inaugurated. Wherever it was possible to do so, a 5-day Monday through Friday work week was put into effect. However, the nature of the responsibilities of the hospital made this impossible in many areas. This meant that in these areas, employees had to continue to work Saturday and/or Sunday. Employees are given compensatory time off during the week in order to maintain the 40-hour work week pattern. The new policy was greatly appreciated by the hospital personnel and undoubtedly will be helpful in selling our jobs to prospective employees.

Economists and business men are expecting a mild "recession" during the coming year. This may tend to stabilize the labor market, somewhat.

Perhaps the most important prospect for the coming year is a program of Work Simplification which is timely — perhaps overdue — for streamlining many of our activities in order that our personnel may be used more effectively and economically.

EDMUND R. MATTOS,
Personnel Director

Public Relations Department

The Infirmary's Annual Report appears as soon after the close of the hospital's fiscal year as official figures can be obtained from the auditor. This year, in conformity with all "Red Feather" agencies in the United Community Services, our fiscal year has been changed to close October 5, and so the Annual Report has a new, early winter publication date.

Pending this change, no report has appeared since the 1951 issue, which came out in the spring of 1952. It will be noticed that while the report covers progress and figures for the year just past, the listing of officers, staff, committees and department heads is current with the date of going to press.

The new publication date, as established this year, should increase the Annual Report's usefullness and interest. The report, as prepared by this Department since 1947, is sent mainly to the community agencies that use our services, and to other hospitals, institutions, reference libraries, etc. Bringing it out in the winter will insure the material being most current during the season when the book is most used for reference as a directory.

The Annual Report is also sent to some contributors and foundations that could be expected to be most interested in such a detailed account of the Infirmary's work. However, for general information and for fund raising purposes, we put out this year, as previously, a variety of pieces pointing up different phases of our work in briefer form and illustrated with photographs.

For example, the brochure explaining the Winthrop Foundation and Clinic for the Deaf, is one of the pieces intended first for patient information but equally useful as background material for the many professional visitors who come from all over the country to observe in this pioneer clinic. As with other such material, the brochure was produced by this Department in collaboration with the doctors in charge.

In the past year such publications as the admitting folder, which is given to all hospital patients, the personnel folder, the booklet to assist in the follow-up of patients with glaucoma, or the pamphlet explaining the classes in esophageal voice, have all been re-edited, with new pictures and up-to-date material. A new folder to interest graduate nurses in the opportunities for graduate study at the Infirmary is the most recent such piece to appear.

Fund raising in the past year, as sanctioned by the United Community Services, has been looking toward the financing of the Infirmary's newest building project — new space for teaching and research. A mailing at Christmas time, which went to old friends, did not solicit funds but rather contained a brief interim report of the hospital, to bridge the gap during the change-over in fiscal year.

The gratifying return from this mailing together with the regular Spring solicitation (this year a single mailing), brought in a nest egg of $44,610.43 for the research building. As this research project will begin, we hope, in 1954, fund raising will again become of first importance and to this end, we are constantly working on the mailing list to include former patients and to keep up-to-date on addresses. Those who have not worked on the endless and meticulous detail necessary to keep up a good mailing list could not understand how much of the Department's summer is spent on just this job alone. For the past two summers, we have had the part time assistance of a competent college girl, Miss Ann Drummy, with this work.

IDENTITY STILL IN QUESTION

The Infirmary's identity as an independent hospital continues to require constant clarification. The many facets of our cooperation with the Massachusetts General Hospital plus the close proximity that makes this association possible, lead to confusion which the public relations program must attempt to clear up, for the sake of the Infirmary's independent prestige.

Luckily, because of the interest and importance of eyesight and hearing, the Infirmary has no difficulty in getting publicity. For example, the March issue of the Old Colony Trust Company's "Time and Change" series of newspaper ads featured the Infirmary's growth from its inception in 1824 in the old Scollay Building, to its present status as the nationally known eye and ear hospital for this part of the country.

Last summer, the Infirmary shared in a Community Services series of articles in the daily newspapers throughout the state, with material gathered here on eye accidents, their prevention and treatment. Also the featured case history in the UCS 1953 Annual Report included service at the Infirmary, when the patient in the story came here for a hearing difficulty.

Another rather unusual type of community cooperation, which has been mentioned before in these reports, was repeated last summer when Judge John J. Connelley of the Juvenile Court sent us a group of boys who had been arrested for having a BB gun and firing it recklessly. The boys and their parents, in such instances, always leave in a chastened frame of mind after observing one of the all too many tragic cases we have where some innocent young by-stander is blinded by carelessness.

National and even international publicity with a happier prognosis, was achieved from the press conference we arranged last July for our youngest patient to be fitted with glasses — a baby four and a half months old. The baby has gained near-normal vision thanks to his glasses, following successful surgery for congenital cataracts. Another press conference, this one in September, publicized the courage and rehabilitation of the Marshfield highschool girl who lost her sight in a school chemistry lab accident. This story told how she is now working here at the Infirmary, where she had her medical care, as a competent medical records typist, after a course at Perkins and later a training period with her seeing-eye dog.

For those public relations problems that arise out of office hours, the Director is on 24-hour call. Good relations with the newspapers are promoted by having one person always available for their questions, someone with the time and training to insure that all papers and press services get equal treatment and that the hospital's viewpoint is effectively translated. So, with the cooperation of the Admitting Office, press calls are referred to the Director at all times of the day and night — and the reporters think nothing of calling back in the hope of getting a late bulletin before the morning paper goes to press at 2:00 A.M.

This Department continues to cooperate with other departments in the hospital on special events. An outstanding example of community service established this year is the series of conferences arranged by Miss Shepard, Director of Nursing Education, for the industrial nurses of this area. For the first conference, held in April, on the treatment of eye injuries, we aided Miss Shepard in reaching those companies that have, in the last year or so, sent employees to us for emergency care.

Currently, this Department has consisted of the Director and her assistant who also takes care of the routine stenographic work not only for our public relations functions but also for fund raising. In the past year, the department has had an unusual turnover in assistants, Miss Barbara Singer leaving after a little over two years here, for study abroad, and her successor, Miss Marjorie MacKenzie leaving after only a few months, to continue her graduate work at the Yale School of the Drama. Therefore, Miss H. Jean MacDuffie, the present assistant who came in September, is learning the job during our busiest season, especially since this year the United Community Services has ruled that all fund raising shall be done in the one month of December.

VIRGINIA GEROULD,
Director, Public Relations

The Boston Eye Bank

SINCE the inception of the Boston Eye Bank it has been obvious that there is always a need for a community educational program. One of the important steps taken in the past year to insure this education was the printing of our new condensed folder explaining the work of the Eye Bank and the procedure for donating eyes.

Our new folder is brief and to the point, attractive in design with four pictures to catch the eye of the most casual observer. For this promotion piece we are indebted to the Junior League of Boston, Inc. who paid not only for the folder, but also for the donor blanks.

With the new pamphlet, we were able to put out a mailing to our Sponsors, contributors, and affiliated hospitals to show them our eagerness for continued, up-to-date publicity on the Eye Bank and our need for more eye tissue.

We prepared an exhibit that was used at the annual meetings of the New England Hospital Assembly and the Massachusetts Medical Society. This exhibit attracted a great deal of attention as it was done with pictures as well as lighted photographs of the eye before and after a corneal transplant. Among others, Eastern Airlines Air Show Committee requested the Boston Eye Bank Exhibit, as one of their free services. At this show, 200 pamphlets were given out over a period of two days — proof to us of the genuine appeal the Eye Bank has to the public.

HOSPITAL CONTACTS

In line again with continuing efforts to keep people conscious of the needs of the Eye Bank, personal contact was made with the Directors of the large general hospitals in metropolitan Boston. We informed them of recent developments in our work, impressing on them the continued need for eye tissue.

Since the last annual report, six new hospitals have been added to our list of affiliated hospitals — Waltham Hospital, Waltham, Massachusetts; Harbor Hospital, York Harbor, Maine; Milton Hospital, Milton, Massachusetts; Chelsea Naval Hospital, Chelsea, Massachusetts; Children's Hospital, Boston, Massachusetts; and Salem Hospital, Salem, Massachusetts. The total number of hospitals in New England affiliated with the Boston Eye Bank now stands at 55.

As well as the hospitals, the Red Cross Motor Service, the airlines and the railroads all cooperate with us in expediting delivery of eye tissue. The Eye Bank wishes to pay tribute to these organizations for their prompt and efficient cooperation.

NEW MOVIE IS EDUCATIONAL AIDE

The official premier of "Eyes of Service" was shown May 12, National Hospital Day. This invaluable film represents a milestone in the educational program of the Eye Bank.

The film was produced through the unstinting efforts of the Junior League of Boston, Inc. and has already proved extremely valuable in explaining in a graphic way the operations of the Eye Bank. So far we have had 25 showings and many more are scheduled to civic and social clubs as well as hospitals and medical associations.

"Eyes of Service" was filmed by Sturgis-Grant Productions in New York, well known for their medical motion pictures. Produced in color and sound, the twelve-minute movie depicts the experience of one patient who benefits by the services of the Eye Bank. Shown are the various steps in the operation of the Eye Bank and how it procures and handles the eye tissue from the donor to the person to be benefited by it.

Flyers were made this past summer to promote the film. With every Eye Bank folder and donation form, a flyer, offering the film to program chairmen, is sent out. As well as the film, we supply the screen and projector; these also were donated by the Junior League.

To further this education of the community, the Eye Bank has used the radio and newspapers whenever possible. In the newspapers many feature stories have appeared, giving the accurate story of our functions and aims. We have also had pictorial views of the Eye Bank. The combined use of radio and newspapers always serves to increase our donor inquiries.

FINANCES

The cost of the film as well as the screen and projector was underwritten by the Junior League of Boston, Inc. — the total being $4,300. During the time covered by this report $3,570 was received in voluntary contributions. Among them was the contribution of $1,000 received from the will of Alice Capers of Watertown, Massachusetts and another $1,000 received from the New Hampshire Association for the Blind. Fund raising was done in December of last year and is planned for the spring of 1954.

Since the last report, the Boston Eye Bank has received 143 eyes, of which 24 were used for corneal transplant operations and the remainder for research. No eyes are wasted. Eye tissue has proved most valuable in research problems related to glaucoma and separation of the retina. For various reasons which have been listed in previous reports, many eyes are not suitable for transplantation. It is worth emphasizing that the use of eyes for research is as important, though not as dramatic, as their use for transplantation.

SCHOLARSHIP

A grant of $2,500 was provided by the Junior League to Dr. Toichiro Kuwabara, working in the Howe Laboratory under the direction of Dr. David Cogan. His study was concerned with the deposition of fat in the cornea, a problem intimately related to corneal transplantation. Obviously, a problem of this type requires long and involved study. Dr. Cogan reports that Dr. Kuwabara had made an auspicious start and a great deal of clinical and experimental data is being accumulated that should yield leads of significant consequences.

It has been tentatively planned to make a full-scale report of the study before the International Congress of Ophthalmology to be held in New York next fall. Official acknowledgment will be made at that time to the Boston Eye Bank.

The Eye Bank received $750 to provide a scholarship for the study of corneal transplant technique. Dr. Dunphy has selected a tentative candidate for the course which will be given early in 1954.

JUNIOR LEAGUE COOPERATION AND SUPPORT

The annual report would not be complete without our expressing our sincere gratitude to the Boston Junior League, Inc. for its continued support and interest.

In the spring of 1953, Mrs. Harris Fahnestock was replaced by Mrs. James Willis as Junior League Chairman for the Eye Bank. Much greatly needed clerical help was provided by two Junior League volunteers, Miss Judy Tunnell and Miss Barbara Kimball.

In June, 1953, Miss Phyllis B. Scott who had capably filled the position of executive secretary resigned to be married in September. Miss Marilyn G. Myers is the new executive secretary.

Marilyn G. Myers,
Executive Secretary

Housekeeping Department

This Department during the past 18 months, since our last report, has had increased duties, many of which are not outwardly noticeable. This has been accomplished in spite of more than average percent of turnover in both the male and female employee groups.

The closing of the Infirmary storeroom on the first of May, 1953, allowed for larger office space which was badly needed, and we now have a part-time clerical worker to help with routine. This office now carries all hospital printed forms, requisitions, record forms, etc., except for a few that are required for what might be classified as emergency pieces. Requisitioned items from the Massachusetts General Hospital Upper Store are delivered to us on Friday, are supplemented by adding the forms from our own stock, and are then delivered to departments on this same day. All special purchase orders still come to our receiving area and are delivered by us.

The Linen Room has added several new items of patients' apparel. Pajamas, hospital johnnies, bathrobes of different and improved materials not only look better but also seem to have a longer life, thus saving both money and time.

Our maintenance team has been increased by one member who is basically a plumbing trouble shooter, an addition which has helped greatly on more than one occasion. Routine inspections and preventive maintenance routines, plus advance schedules for maintenance work have gone very smoothly and worked out so well that the maintenance crew has had more time to do "extras". We hope this improved set-up has been felt by all departments.

The opening of Baker 9 for Infirmary retina cases has required the attention of one full-time man. In addition to his routine housekeeping duties, he also helps in the transportation of patients to and from the operating rooms and various clinics. Throughout the hospital, this Department continues in charge of patient discharge work, the complete responsibility for cleaning patient units after the discharge of the previous patient, because this allocation of such duties has proved so helpful to the Nursing Department.

Another area where the Department has added further responsibility is the preparation for meetings of all types, both medical meetings and various committee or group gatherings that are held in many different parts of the hospital. Requests for chairs, signs, etc., are scheduled ahead and seating arrangements, the assembling of moving picture or slide equipment or other materials needed by speakers are worked out with that member of the hospital personnel in charge of the particular meeting.

The continuing renovations and improvements that are making the Infirmary a more up-to-date plant are of great advantage to this Department. New office equipment as in the Bookkeeping Department, and new flooring as now planned for the dietary area, for example, obviously make it an easier job to keep the hospital clean and attractive looking.

The annual Department picnic, which is paid for from the sale of waste paper and junk, was a great success last May, with about 150 employees and guests attending.

Roscoe C. Adams,
Executive Housekeeper

Howe Laboratory

The past year saw a conservative expansion at the Howe Laboratory. Several new investigators joined the staff, some additional laboratory space was acquired and the scope of activities widened slightly. There was, however, a predominant continuity of research with that of previous years and the following is essentially a progress report.

The fundamental discovery of a means to measure the facility of outflow of the aqueous humor of the eye has brought forth further practical results. The application of this method has proved of major importance not only in the detection of early glaucoma and in the defining of different types of glaucoma, but also it has led logically to improvements in the treatment of glaucoma.

It is perhaps not exceeding the bounds of humility to state that this study of tonography and gonioscopy, which has been jointly pursued at the Laboratory by Drs. W. Morton Grant and Paul A. Chandler, has resulted in one of the most important contributions to ophthalmology in the past decade. Recently, Dr. Robert Trotter has joined the staff to explore further some of the practical applications of tonography and financial assistance has been obtained from the U. S. Public Health Service.

The investigation of radiation effects on the eye, supported by the Atomic Energy Commission, has continued to occupy a prominent position in the activities of the Laboratory. Through facilities at the Los Alamos Scientific Laboratories, it has been possible for us to irradiate rabbits with neutrons in a manner as nearly as possible similar to that which we previously employed with X-rays.

By subsequent study of the development of cataracts, a biologic equivalence has been established for the production of cataracts by X-rays and by neutrons. Both forms of energy induce tissue damage presumably through ionization, but it is now possible to state that for equivalent ionization, the neutrons are approximately ten times as cataractogenic as are X-rays. Such information is of importance in establishing tolerable levels of radiation and in understanding the pathogenesis of radiation effect on the eye.

PIONEER STUDY OF RADIATION

The susceptibility of the human lens to X-ray has been determined by studying a group of approximately 60 persons who have received a known amount of radiation through the eye one or more years previously. It is believed that this is the first series involving a substantial number of patients which has been observed since accurate X-ray dosimetry was introduced two decades ago. It now appears that no lens opacities occur with exposure of 800 to 1000 roentgens, and progressive opacification of the lens, leading to mature cataracts, occurs with irradiation in excess of 2000 roentgens.

Biochemical research has played a conspicuous role in the Laboratory's affairs over the past 12 years. During the past year, Dr. Jin Kinoshita joined the staff holding a joint appointment in the Laboratory and the Department of Biochemistry of the Harvard Medical School. Dr. Kinoshita, who has had special experience and training in protein metabolism, is currently directing his efforts toward elucidating some of the basic biochemical processes in the cornea and lens. Such studies are essential groundwork for an adequate understanding of the normal and abnormal operations of the eye.

The perennial study of the effects of toxic substances in the eye, and their treatment, has received new impetus with the discovery by Dr. Grant that certain calcific deposits in the cornea, notably those of band keratitis and of lime burns, may be successfully removed by the chelating agent, ethylenediamine tetra acetate. To determine whether some comparable manner of treatment might be applicable to other chemical injuries to the eye, a project has been undertaken in conjunction with Mr. Harold Kern, correlating the nature of the ocular lesions produced under various physical and chemical conditions.

CORNEAL INVESTIGATION

Another investigation being currently pursued pertains to fat accumulation in the cornea. Since this is one of the major causes of corneal opacification, an understanding of its pathogenesis and treatment might be expected to have far-reaching importance. Accordingly, Drs. Cogan and Toichiro Kuwabara have embarked on an extensive program correlating experimental and clinical observations on fat metabolism in the cornea. This study is being supported in part by the Boston Eye Bank.

The foregoing projects have been picked for reference as they stand out prominently at the moment. But listing them fails to give an adequate idea of the operations of the Laboratory. It is true that these studies, along with several others that might as readily have been selected, are the continuing projects to which energies are recurrently directed, but, in actual practice, the routine of teaching, consulting, and casual exploring occupy properly an even more conspicuous place on the Laboratory's agenda. While less amenable to categorical enumeration, these latter activities are equally important in the integration of the basic and clinical sciences to which the Laboratory is dedicated.

By most standards, the Howe Laboratory is small. It does not aspire to be large, lest the degree of organization involved would jeopardize the free and informal research which is its purpose to support. But the Laboratory does not wish to be small, either; that is, so small that it cannot fulfill its purpose of coordinating the sciences in ophthalmology. It wants to have sufficient resource to compete for able and diversified talent and to support this talent with dignity and efficiency.

HOPES FOR THE FUTURE

We have come to depend increasingly on outside aid. Government agencies especially have made major contributions to our operations. For this we are most grateful and trust that the satisfaction is mutual. But it is no secret that the type of project support to which most impersonal organizations are necessarily committed, is suitable for applied research rather than for exploratory experimentation. For this, we still depend on our deflated income and on various donations.

Happily, we have had in the past few years a group of benefactors, mostly physicians, who have made possible a fund that, being unrestricted, has had a practical value out of proportion to its actual equity. This fund, together with the assistance of several organizations, has made possible the maintenance of the Laboratory at the present level with a continuity of research productiveness.

It is our persistent hope, however, that sometime, somehow, the endowment may be increased so that the Laboratory may expand to what most of us think would be an optimum size, having a firm income of approximately three times its present amount — which is only about $32,000 today. In the meantime, we shall attempt to maintain a high yield for the support which is presently available and to make the Howe Laboratory a sound investment for future benefactors of mankind.

David G. Cogan, M.D.,
Director of the Howe Laboratory

Lucien Howe Library

"If we have the books in the Library we don't have to worry."

This doctor's remark recently overheard in the hall of the Infirmary is an accurate expression of the faith Staff men have in the Howe Library. This faith is based on the knowledge that they can fulfill almost all their ophthalmic reference wants from the shelves of the Library. The problems of the Library and its Committee in keeping this faith and maintaining other standards are not generally known or appreciated by everyone who uses the Library. Perhaps this report will provide some enlightenment.

During the year the Howe Library increased its book and journal holdings by 112 items. This collection is now near the 7,000 mark. In a year's time more than 3,000 items were circulated on loan and 6,500 patrons made use of the Library. To transact this load of business and to house these books, the Library had only 700 square feet of floor space. When this fact is pointed out, it is not to be wondered that it was a happy moment indeed when the space plans of the proposed Research Center revealed that almost twice the present floor area would be available to the Library.

Should anyone question the change in the "complexion" of the Infirmary in recent years, or the increased importance of the Howe Library, the figures that follow answer such doubts. In the year 1931 only 9 doctors with staff affiliation made contributions to the ophthalmic literature; in 1951 articles bearing the names of 42 Infirmary men appeared in the medical journals. It would have been impossible for these men to have done their research or prepared their papers for publications without the facilities of the Howe Library. Mere statistics cannot illustrate how greatly medical literature has been enriched by this teamwork of the Infirmary research doctor and the Howe Library.

The projected laboratories and their staffs will make larger demands on the Howe Library than in the past. The Committee of the Library and its librarian have been making preparations to meet them, as the activities of the past year will demonstrate.

During this period a detailed plan for an expanded book and journal buying program was prepared by the librarian and presented to the Library Committee for study. Shelf list cards of a new nature were prepared for all journal and society transactions holdings. The older ophthalmic textbooks were reclassified and documented and when necessary, repaired or rebound. The 20th century publications are now being processed. A card bibliography of the journal writings of the Ophthalmic Staff members was prepared. Reprints of these writings are being bound in volumes embracing two-year periods. Selected writings of staff members are also being bound. This means that machinery has been set up for an "Archives" of the Infirmary. Now that the initial work has been done, it will take only a few hours work a month to keep these valuable reference sources up-to-date.

In keeping with the trends of the time the Howe Library has been active in the field of visual education. Medical motion pictures have been solicited by the librarian and shown before the house officers and other interested persons. On special occasions stereoscopic slides of studies of the diseases of the anterior segment of the eye have been shown in the Library to the medical public. These slides and their special viewers were made available through the cooperation of Dr. David D. Donaldson of the Howe Laboratory who was responsible for the development of many of the techniques incorporated in their productions.

The gallery of photographs in the Infirmary corridor is a part of the Library. The addition of portraits of the more recent chairmen of the Section of Ophthalmology of the American Medical Association was financed by the Infirmary Board of Ophthalmic Surgeons.

Like other Libraries, the Howe Library acquires a number of duplicate and unwanted items. This year over 200 such items were distributed to other medical libraries here and abroad through the medium of the Medical Library Association Exchange. We, in our turn, received through this agency many needed items to fill the gaps that exist in some of our holdings.

Before closing this section of the Library Report, mention should be made of the use made of the Howe Library by students. Upon request, the Library supplied nurses here for special training with reading material. Simmons College sponsored a class in orthoptic training here and girls in this course made ample use of the Library. The Harvard post-graduate course in ophthalmology advised its twenty students to turn to the Howe Library for ophthalmic literature. And the Harvard Medical School underclassmen stopped for reading in the Library on their rounds of instruction.

So the Howe Library served the student, the doctor, the research worker. Each year there is an increase in demands and the Library meets the requests. But that is the job of the Library. It is not a book museum but a vital growing organization well integrated into the clinical, research, and teaching life of the Infirmary.

LIBRARY OF OTOLARYNGOLOGY

Much that is said above about the Howe Library is true of the Library of Otolaryngology. This younger, smaller collection — about 800 volumes —

is nevertheless an equally vigorous and essential organization. Here the problem of space is dramatically illustrated, for the books are shelved to the very ceiling.

Watching this collection grow has been an interesting experience. About three years ago the Library's life began with a little over 200 volumes. The journal holdings at that time were marked by wide gaps of missing volumes; today those gaps have been narrowed. The Society transactions holdings were almost non-existent; today their volumes cover several shelves. If space were available, the holdings in this field would be the most complete in the Boston area, as several series are being held for the Library by their donors until they can be housed here. All the recent textbooks on otorhinolaryngology are purchased as soon as they come off the press and these books, bound in neat plastic covers, are colorful invitations to the potential reader.

For many years a number of books and bound journals belonging to the ENT service of the Infirmary were housed in the Treadwell Library of the Massachusetts General Hospital. During the early spring of this year, these items were brought home to the Infirmary and placed in the Library. It is no longer necessary to go to another hospital and another library for books that are Infirmary property, which has meant a great saving in time to those using the ENT Library.

No Library Report would be complete without reference to the Library's patrons. Who uses the Infirmary's Library of Otolaryngology? Take a cross-section of the Infirmary's population and the question is answered. Technician, student, nurse, research worker, orderly, doctor, and on occasion a patient. It is a source of amazement that such a comparatively small collection is able to serve so diverse a group of patrons, a compliment to the Library's planners.

CHARLES SNYDER,
Librarian

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HOWE LABORATORY OF OPHTHALMOLOGY

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Directory

MEMBERS OF INFIRMARY STAFF, ALUMNI AND RESIDENTS

Names of members of the Infirmary Staff are printed in capital letters.

Abbreviations following the name indicate to what service of the Infirmary the individual belongs:

Oph.; Ophthalmology
Otolar.; Otolaryngology
Bron.; Bronchoscopy
Esoph.; Esophagoscopy

Letters in small type preceding the abbreviations indicate the special work of the individual:

a.; assistant
an.; anesthetist
assoc.; associate
c.; chief of service
cons.; consulting
dir.; director
exec. a.; executive assistant
fel. res.; fellow in research
grad.; graduate
path.; pathologist
r.; resident
roent.; roentgenologist
s.; surgeon
s.p.o.; surgeon for plastic operations
s.t.c.; surgeon assigned to Tumor Clinic

As of October 1, 1953:

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ALLEN, HENRY F., (a. Oph.), Oph. 1949
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Allen, John H., Aural, 1904
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Filmer, George A., Oph. 1939
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Fultz, William E., Oph. 1927
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Gifford, Harold, Jr., Oph. 1934
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Giller, Herbert, Oph. 1952
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Goduti, Richard J., Oph. 1946
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Goldcamp, Richard R., Otolar. 1948
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Goldman, A. Milton, Oph. 1924
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Winthrop Foundation
20 Charlesgate West, Boston, Mass.

MERRITT, ROBERT E., Oph. 1920, Retired
Valley Center, Cal.

MERTINS, PAUL S., Otolar. 1936
32 Clayton, Montgomery, Ala.

MESSENGER, HARRY K., Oph. 1934
140 Marlborough, Boston, Mass.

MEYER, MONTO F., Oph. 1919
904 Canal Bank Bldg., New Orleans, La.

MILAM, DANIEL F. (r. Oph.)

MILES, NATHAN E., Oph. 1937
1031 So. 21st, Birmingham, Ala.

MILLER, DANIEL (a.s. Otolar.), Otolar. 1943
403 Commonwealth Ave., Boston, Mass.

MILLS, LLOYD, JR.,Oph. 1947

MONTGOMERY, WILLIAM (r. Otolar.)

MOORE, DONALD E., Oph. 1937
417 Medical Arts Bldg., Syracuse, N. Y.

MOORE, EDWARD E., Oph. 1944
Box 476, Marion, Ala.

MOORE, JAMES A., Otolar. 1940
525 E. 68th, N. Y. C.

Moorman, John D., Oph. 1939
Times Bldg., Huntsville, Ala.

MORRISSEY, ARTHUR M. (a. Oph.)
185 High, Medford, Mass.

MOSHER, HARRIS P. (cons.s. Otolar.)
127 Front, Marblehead, Mass.

MOSHER, HENRY A. (a.s. Oph.), Oph. 1941
71 Bay State Rd., Boston, Mass.

Moteley, Frederick E., Otolar. 1925
Charlotte Eye & Ear Hospital, Charlotte, N. C.

Moulton, Everett C., Jr., Oph. 1948
Merchants Nat'l Bank Bldg., Fort Smith, Ark.

MUELLER, WERNER (Dir. Mosher Lab.), Otolar. 1933
243 Charles, Boston, Mass.

Murphy, William E., Otolar. 1933
Slater Bldg., Worcester, Mass.

Myers, Roscoe W., Oph. 1927
36 Pleasant, Worcester, Mass.

Myers, Stanley A., Otolar. 1937
2218 Market, Youngstown, Ohio

MYSEL, PHILIP (cons.s. Otolar.)
483 Beacon, Boston, Mass.

Nachlas, Nathan E., Otolar. 1951
Military Service

Navas, Luis, Otolar. 1950
Apartado N. 376, Managua, Nicaragua

Nicholson, Harry M., Aural 1913
515 Medical Arts Bldg., Hamilton, Ont., Canada

O'Connell, John D., Oph. 1943
50 Farmington Ave., Hartford, Conn.

O'Connor, Michael James, Oph. 1946
Valley Nat'l Bank Bldg., Tucson, Ariz.

O'Connor, Michael John, Aural & Lar. 1923
105 Waterman, Providence, R. I.

OFFENBACH, BERTHA (a. Oph.)
270 Commonwealth Ave., Boston, Mass.

Ogden, Frederic W., Otolar. 1942

OKAMURA, ICHIRO (a. Oph.), Oph. 1952
243 Charles, Boston, Mass.

Olds, Bomar A., Otolar. 1929
26 Linden Ave., N.E., Atlanta, Ga.

OLSEN, HENRIETTA I., R.N. (exec.a.)
M. E. & E. I.

Parker, Harry C., Oph. 1902

PATTERSON, WILLIAM (r. Oph.)

PERONE, PIERO (r. Otolar.)

PETERSON, WALBORG, R.N. (exec.a.)
M. E. & E. I.

Pfister, Raymond L., Otolar. 1952
1298 Herschel Ave., Cincinnati, Ohio

PIPPITT, RICHARD B. (a. Oph.), Oph. 1949
99 Bay State Rd., Boston, Mass.
2 Seaward Ave., Wellesley Hills, Mass.

POIRIER, GEORGE H. (cons.s. Otolar.)
60 Bay State Rd., Boston, Mass.

POLLEN, ABRAHAM (a.s. Oph.), Oph. 1944
636 Beacon, Boston, Mass.

Pollock, Frederic J., Otolar. 1935

Poppen, Mayo J., Oph. 1948
6356½ Van Nuys Blvd., Van Nuys, Cal.

Posner, Marvin, Oph. 1952
371 State, Albany, N. Y.

Price, F. Raymond, Oph. 1936
118 Rutledge Ave., Charleston, S. C.

Provost, Adolphie J., Otolar. 1927
66 Middle, Manchester, N. H.

Prudhon, Charles A., Otolar. 1930
168 Sterling, Watertown, N. Y.

Quebedo, A. Arturo, Oph. 1933
4a Ave., Sur 19, Guatemala City, Guatemala, C. A.

Quedevo, Julio, Otolar. 1941
15 C.O. 5, Guatemala City, Guatemala, C. A.

QUINCY, JOSIAH E. (cons.s. Otolar.), Otolar. 1926
270 Commonwealth Ave., Boston, Mass.

RAGAN, JOHN J. (r. Oph.)

Rambo, J. H. Tom, Otolar. 1948
434 E. 52nd, N. Y. C.

Raynes, Alphonse F., Oph. 1923
16 Market Sq., Portsmouth, N. H.

Reagan, Daniel J., Oph. 1943, Otolar. 1944
507 Main, Worcester, Mass.

REED, GEORGE F. (a. Otolar.), Otolar. 1952
243 Charles, Boston, Mass.

REGAN, CHARLES D. J. (a. Oph.), Oph. 1953
520 Commonwealth Ave., Boston, Mass.

Rice, Theodore A., Oph. 1942
390 Main, Worcester, Mass.

RICE, EARLE W. (r. Otolar.)

RICHARDS, LYMAN G. (cons.s. Otolar.), Otolar. 1942
1101 Beacon, Brookline, Mass.

RICHARDSON, JOHN R. (s. Bron. & Esoph.), Otolar. 1935
403 Commonwealth Ave., Boston, Mass.

RIEMER, HUGO B. C. (cons.s. Oph.)
62 Winter, Norwood, Mass.

RIEMER, KARL (a.s. Oph.), Oph. 1943
403 Commonwealth Ave., Boston, Mass.

ROGERS, WILLIAM P. (a. Otolar.)
264 Beacon, Boston, Mass.

ROOPENIAN, ARAM (a.s. Otolar.), Otolar. 1944
475 Commonwealth Ave., Boston, Mass.

Rothwell, Stephen C., Otolar. 1925
Monquitt, Mass.

RUBEN, MAURICE (a.s. Otolar.)
311 Commonwealth Ave., Boston, Mass.

RUGGLES, RALPH H. (cons.s. Oph.), Oph. 1920
394 Marlborough, Boston, Mass.

RUNGE, PAUL M. (a. Oph.)
140 Marlborough, Boston, Mass.

SACHS, BENJAMIN (s. Oph.), Oph. 1925
636 Beacon, Boston, Mass.

SA'EED, YUNIS M. (r. Otolar.)

Sainsbury, Augustus W., Otolar. 1943
42 No. Main, Canandaigua, N. Y.

Sams, James M., Otolar. 1949
Jones Eye, Ear, Nose & Throat Hospital,
Johnson City, Tenn.

Sargent, Francis B., Aural & Lar. 1923
124 Waterman, Providence, R. I.

Savage, Ross E., Oph. 1910
Gloucester, Mass.

Scarney, Herman D., Oph. 1928
573 Fisher Bldg., Detroit, Mich.

SCHALL, LeROY A. (c. Otolar.)
243 Charles, Boston, Mass.

SCHEPENS, CHARLES L. (a. Oph.)
243 Charles, Boston, Mass.

Schnebly, J. Thomas, Oph. 1936
900 17th, N.W., Washington, D. C.

SCOTT, ALFRED W. (r. Oph.)

SCOTT, DAVID H. (a. Oph.), Oph. 1949
1 Monument Sq., Beverly, Mass.

SEALE, EARL S. (a.s. Oph.), Oph. 1940
126 Bay State Rd., Boston, Mass.

SENECAL, ALPHONSE L. (a. Otolar.)
1 Monument Sq., Beverly, Mass.

Shambaugh, George E., Jr., Otolar. 1932
55 E. Washington, Chicago, Ill.

Shea, John J., Otolar. 1953
3259 Overland Pl., Memphis, Tenn.

Sheehan, Linus A., Oph. 1943
210 Angell, Providence, R. I.

Sherman, Morris, Otolar. 1950
82 W. Commerce, Bridgeton, N. J.

SHLOSSBERG, FRANK R. (a.s. Otolar.)
116 Emerson, Haverhill, Mass.

Skilling, Francis C., Oph. 1933
442 Ingram Bldg., Miami, Fla.

Slaughter, Earl C., Otolar. 1940
Granada Bldg., Norfolk, Neb.

SLOANE, ALBERT E. (a.s. Oph.)
416 Marlborough, Boston, Mass.

Smith, Harold D., Otolar. 1937
342 Investment Bldg., Pomona, Cal.

SMITH, TAYLOR R. (a. Oph.), Oph. 1951
243 Charles, Boston, Mass.

Smith, William L., Oph. 1950
U. S. Naval Hospital, St. Albans, L. I., N. Y.

Snow, Robert C., Otolar. 1940
202 E. So. Temple, Salt Lake City, Utah

SPINOLA, EDMUNDO T. L. (r. Otolar.)

Spratt, Charles N., Oph. 1904
1231 Medical Arts Bldg., Minneapolis, Minn.

Stapff, Volker H., Otolar. 1952
Av. Uruguay 826, Montevideo, Uruguay,
South America

Stephens, H. Frederick, Oph. 1939
195 Thayer, Providence, R. I.

STERNSTEIN, HERMAN J. (assoc.s. Otolar.)
416 Marlborough, Boston, Mass.

STONE, WILLIAM, JR. (a. Oph.), Oph. 1949
1101 Beacon, Boston, Mass.

SULLIVAN, GARRETT L. (a.s. Oph.), Oph. 1938
101 Bay State Rd., Boston, Mass.

SWARTZ, MORRIS (a. Otolar.)
124 Ocean, Lynn, Mass.

Tegelberg, Julius, Otolar. 1931
390 Main, Worcester, Mass.

Thomas, John H., Otolar. 1944, Oph. 1946
262 E. Market, Warren, Ohio

THOMPSON, PETER HUNTER (cons.s. Oph.), Oph. 1902
308 Commonwealth Ave., Boston, Mass.

TOBEY, HAROLD G. (cons.s. Otolar.), Aural 1915
403 Commonwealth Ave., Boston, Mass.

Toot, J. Frederick, Oph. 1922
520 First Nat'l Bank Bldg., Canton, Ohio

TRAKAS, JOHN (a. Otolar.)
1269 Beacon, Brookline, Mass.

TROTTER, ROBERT T. (a. Oph.), Oph. 1951
Howe Lab., 243 Charles, Boston, Mass.

Twitchell, Marshall C., Oph. 1941
217 So. Union, Burlington, Vt.

Vail, Derrick T., Oph. 1924
700 No. Michigan Ave., Chicago, Ill.

VERHOEFF, FREDERICK H. (cons. c. Oph.)
395 Commonwealth Ave., Boston, Mass.

Viger, Roland J., Oph. 1937
1414 Drummond, Montreal, Que., Canada

WAITE, J. HERBERT (cons.s. Oph.), Oph. 1923
7 Bay State Rd., Boston, Mass.

WALKER, D. HAROLD (cons.s. Otolar.), Aural 1902
Peterborough, N. H.

Wattles, F. Merrill, Otolar. 1938
1200 So. Kuhl Ave., Orlando, Fla.

Webster, Franklin R., Oph. 1926
810 State Tower Bldg., Syracuse, N. Y.

WEBSTER, RICHARD C., JR. (a. Otolar.)
1101 Beacon, Boston, Mass.

WEILLE, FRANCIS L. (s. Otolar.), Otolar. 1929
247 Commonwealth Ave., Boston, Mass.

Weisman, Herman J., Otolar. 1944
76 Limerock, Rockland, Me.

WEST, FRANCIS J. (a. Oph.), Oph. 1947
1101 Beacon, Boston, Mass.

WHITE, LEON E. (cons.s. Otolar.), Aural & Lar. 1923
395 Commonwealth Ave., Boston, Mass.

Whitney, Raymond C., Oph. 1922
227 Union, New Bedford, Mass.

WILKINS, SAMUEL H. (cons.s. Oph.)
270 Commonwealth Ave., Boston, Mass.

Willis, Harry C., Aural & Lar. 1923
216 E. Nash, Wilson, N. C.

Winkler, Herman A., Otolar. 1926
224 Thayer, Providence, R. I.

Wishart, David E. S., Aural & Lar. 1922
47 Grosvenor, Toronto, Ont., Canada

WOODARD, M. WAYNE (a. Oph.), Oph. 1950
9 Central, Lowell, Mass.

Wright, Clarence F., Otolar. 1931
Weston, Ont., Canada

Wright, Edward N., Otolar. 1933
103 May, So., Fort Williams, Ont., Canada

Zanek, Otto L., Oph. 1946
1704 Espercon Bldg., Houston, Tex.

ZEAVIN, BERNARD (r. Oph.)

ZONDERMAN, BERNARD (a.s. Otolar.), Otolar. 1946
314 Commonwealth Ave., Boston, Mass.

Member of

BOSTON HOSPITAL COUNCIL

AMERICAN HOSPITAL ASSOCIATION

MASSACHUSETTS HOSPITAL ASSOCIATION

UNITED COMMUNITY SERVICES OF METROPOLITAN BOSTON

APPROVED BY THE AMERICAN COLLEGE OF SURGEONS

AND THE AMERICAN MEDICAL ASSOCIATION

AFFILIATED WITH THE HARVARD MEDICAL SCHOOL

In Memoriam

FREDERICK E. GARLAND, M.D.
Consulting Surgeon in Otolaryngology

1920—Consulting Laryngology; 1922—Associate Laryngology; 1925—Surgeon in Otolaryngology; 1935—Retired in February; 1935—Consulting Surgeon and Associate in Laryngology in Teaching

FRED S. THORNE, M.D.
Consulting Surgeon in Ophthalmology

1927—Assistant in Ophthalmology; 1935—Associate in Ophthalmology; 1945—Surgeon in Ophthalmology; 1947—Resigned; 1947—Consulting Surgeon in Ophthalmology.

C. JOSEPH MANEY
Member of the Corporation
1952 - 1954
Member of the Committee of Retina Foundation Members

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Massachusetts Eye and Ear Infirmary

ONE HUNDRED and TWENTY EIGHTH

ANNUAL REPORT

1953-1954

BOSTON • MASSACHUSETTS

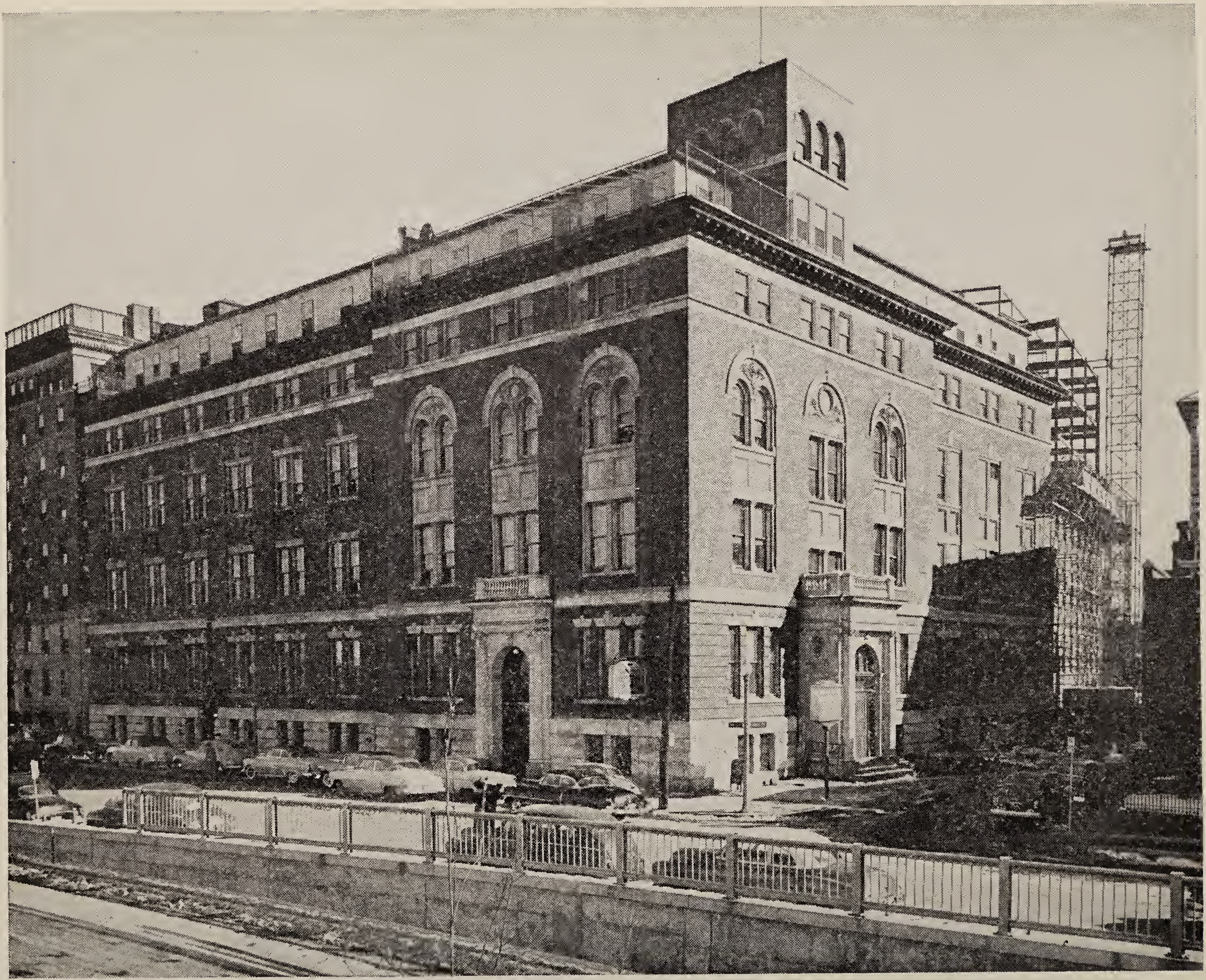
Massachusetts
Eye and Ear Infirmary

ONE HUNDRED and TWENTY EIGHTH
ANNUAL REPORT
1953-1954

Feby 23, 1827

243 CHARLES STREET
Telephone: LAfayette 3-8230

BOSTON 14, MASSACHUSETTS



The Massachusetts Eye and Ear Infirmary, 243 Charles Street, Boston, showing construction at right for the new Research Center.

MASSACHUSETTS EYE AND EAR INFIRMARY

INCORPORATED IN 1827

THE MASSACHUSETTS EYE AND EAR INFIRMARY and its Clinics serve men, women, and children from all over New England and beyond who need expert care for diseases and injuries of the eye, ear, nose, and throat. Established in 1824, the Infirmary is one of the two oldest hospitals in the country specializing in the preservation of good eyesight and sound hearing.

The Infirmary is a voluntary hospital — an independent, non-profit, private institution. The Board of Managers are non-paid and the Staff of specialists give their services without charge to patients in the clinics and on the wards. The hospital receives no support from city or state but is financed by receipts from patients, by voluntary gifts and bequests, and by its share in the Community Fund as a "Red Feather Service." However, the Infirmary's allotment from the Community Fund is not sufficient to cover the amount the hospital gives in "free service" to patients from the Greater Boston area who cannot pay for their own care.

In many ways the Infirmary and the Massachusetts General Hospital, its neighbor, cooperate to give complete medical service to patients. The clinics of both hospitals share a common Admitting Office with its entrance on Fruit Street. Also, for maximum efficiency and economy, the two hospitals unite in such matters as purchasing, maintenance, and personnel management.

The wards and clinics of the Infirmary are open to those who are not able to pay doctors' fees, since the Staff give their services without charge to such patients. Every patient, in the clinics and wards as well as in the private accommodations, is under the medical and surgical care of Staff doctors who are specialists in Ophthalmology and Otolaryngology.

Whenever the patient is already under the care of a doctor, arrangements for his admission to the Infirmary should be made by his own doctor, or the patient should bring a letter from his doctor recommending admission to the hospital. However, any patient who is not under a doctor's care and who is not able to pay for private care, is eligible for treatment in the clinics and wards. In cases of emergency, of course, a patient is admitted immediately at any time of the day or night.

The Clinics, located on Fruit Street, are open daily except Sunday and legal holidays* for a fee of $2.50† per clinic visit. After a preliminary interview, patients are examined by the clinic doctor and treatment is prescribed. If further treatment is necessary, the clinic patient is given an appointment for his next visit, as all but the first visit are by appointment only.

Patients are admitted to the wards by direct appointment with the Admitting Office, 243 Charles Street, from 9 to 10 A.M. daily except Sunday and legal holidays. Arrangement for admission to private and semi-private accommodations is made by the Staff doctor in charge of the patient, who then comes on the appointed day to the Infirmary Admitting Office.

Daily rates for board and room for ward patients are $15† with special services like X-Ray and operating room fees, extra. Rates for child patients are $15† in the ward, with semi-private charges of $18†. For adults, semi-private care on the fourth floor is in four-, five- and six-bedrooms at $16† to $19† per day. Private care is $21† to $24† for single room with lavatory, and $30† for single room with bathroom. These rates include general nursing and ordinary medicine. Private care for detached retina patients on the ninth floor of Baker Memorial Hospital is $18‡ for a four-bed room, and $22‡ for private room.

Blue Cross (Associated Hospital Service) plans are accepted at the Infirmary, the benefits being allowed as soon as approval has been received. All other non-profit insurance is handled by the patient for himself, and he pays the regular rates to the hospital.

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* Ear, Nose and Throat Clinic not open Saturdays in July and August.

† As of October, 1954.

‡ As of August, 1954.

Officers

BOARD OF MANAGERS, 1955

President	Henry Hixon Meyer, 53 State Street, Boston	1937
Secretary	Judge Edmund V. Keville, Pemberton Sq., Boston	1942-43, 1945
Treasurer	Horace W. Frost, 74 State Street, Boston	1940

William H. Claflin, III	74 State Street, Boston	1947
Mrs. Richard Cary Curtis	Manchester, Mass.	1940
Wallace Falvey*	10 Post Office Square, Boston	1950
Robert H. Hopkins	82 Devonshire Street, Boston	1951
James C. Howe	53 State Street, Boston	1914
Rev. Robert G. Metters	15 Newbury Street, Boston	1948
Patrick A. O'Connell*	154 Tremont Street, Boston	1934
William A. Parker	200 Berkeley Street, Boston	1935
Mrs. Sullivan A. Sargent	701 South Street, Needham	1945
Walter H. Trumbull	185 Meadow Brook Road, Weston	1929
Frederic Winthrop	Groton House, Ipswich	1943

* appointed by the Commonwealth

Corporation

(in addition to Managers)

William S. Ballard	45 Milk Street, Boston
Robert F. Bradford	53 State Street, Boston
Melville Chapin	84 State Street, Boston
Mrs. John W. Farley	898 South Street, Needham
Nathaniel Faxon, M.D.	West Falmouth, Mass.
Francis W. Hatch, Jr.	N. E. Mutual, 501 Boylston St., Boston
Thomas H. Hoare	6 Beacon Street, Boston
Mrs. Francis T. Hunter	56 Lawrence Road, Chestnut Hill
Mrs. Varaztad H. Kazanjian	191 Clifton Street, Belmont
William F. Keesler, Jr.	342 Beacon Street, Boston
Arthur T. Lyman	37 Thatcher Street, Westwood
George A. McLaughlin	11 Pemberton Square, Boston
August R. Meyer	53 State Street, Boston
Miss Amelia Peabody	120 Commonwealth Ave., Boston
George L. Pew	17 Storer Street, Portland, Me.
Henry K. Porter	74 Foley Street, Somerville
Huston Rawls	84 State Street, Boston
Honorable Leverett Saltonstall	82 Devonshire Street, Boston
Frederick H. Verhoeff, M.D.	395 Commonwealth Ave., Boston
D. Harold Walker, M.D.	"Tree Tops," Peterborough, N. H.
Howland S. Warren	1 Federal Street, Boston

Committees

EXECUTIVE COMMITTEE

Mr. Henry Hixon Meyer, *Chr.*
Mr. Horace W. Frost
Mr. William H. Claflin, III
Rev. Robert G. Metters

FINANCE COMMITTEE

Mr. Henry Hixon Meyer
Mr. Horace W. Frost
Mr. William A. Parker

SALARY COMMITTEE

Mr. Henry Hixon Meyer
Mr. Horace W. Frost
Mr. William H. Claflin, III
Mr. Francis S. Hill

BUILDING COMMITTEE

Mr. Henry Hixon Meyer
Mr. Horace W. Frost
Mr. William H. Claflin, III
Edwin B. Dunphy, M.D.
LeRoy A. Schall, M.D.
Mr. Francis S. Hill

RESEARCH COMMITTEE

Mr. William H. Claflin, III, *Chr.*
Leroy A. Schall, M.D.
Edwin B. Dunphy, M.D.
George P. Berry, M.D.
Mr. Francis S. Hill
Moses H. Lurie, M.D.
Philip E. Meltzer, M.D.
Herman J. Sternstein, M.D.
George Kelemen, M.D.
Francis L. Weille, M.D.
David G. Cogan, M.D.
Charles L. Schepens, M.D.
Merrill J. King, M.D.
Parker Heath, M.D.
William Stone, Jr., M.D.
Henry F. Allen, M.D.
Mr. David C. Crockett
Mahlon Hoagland, M.D., *Ex. Sec.*

PUBLIC RELATIONS ADVISORY COMMITTEE

Mr. Francis W. Hatch, Jr., *Chr.*
Mr. August Meyer
David G. Cogan, M.D.

HOUSE COMMITTEE

Mrs. John W. Farley, *Chr.*
Mr. Robert H. Hopkins
Abraham Pollen, M.D.
George F. Reed, M.D.

SOCIAL SERVICE ADVISORY COMMITTEE

Mr. Wallace Falvey, *Chr.*
Mrs. Varaztad H. Kazanjian
Mrs. Joseph M. Clough
Mr. James C. Howe
Rev. Robert G. Metters
Moses H. Lurie, M.D.
Merrill J. King, M.D.
Miss Ruth Farrissey, R.N.

LADIES VISITING COMMITTEE

Chairman . . . . Mrs. Varaztad H. Kazanjian
Vice-Chairman . . . . Mrs. Francis T. Hunter
Secretary . . . . Mrs. Roy R. Wheeler
Treasurer . . . . Mrs. Herbert W. Kelley

Mrs. William A. Barron, Jr.
Mrs. Arlie V. Bock
Mrs. Nehemiah Boynton, Jr.
Mrs. Harry E. Braconier
Mrs. Harry P. Cahill
Mrs. Moses Carr
Mrs. Nathaniel D. Clapp
Mrs. Joseph M. Clough
Mrs. David G. Cogan
Mrs. Henry E. W. Cunningham
Mrs. Richard C. Curtis
Mrs. Livingston Davis
Mrs. Walter C. Dodge
Mrs. Weld Douglass
Mrs. Edwin B. Dunphy
Mrs. Henry Erhard
Mrs. John Wells Farley
Mrs. Henry H. Fay
Mrs. Allan R. Finlay
Mrs. Greene Fitzhugh
Mrs. W. Morton Grant
Mrs. Trygve Gundersen
Mrs. George Freeman Hall
Mrs. Bartlett Harwood
Mrs. Harold L. Higgins
Mrs. Valentine Hollingsworth
Mrs. Edgar M. Holmes
Mrs. Carl C. Johnson
Mrs. Henry Loomis
Mrs. Andrew Mason
Mrs. William McCarthy
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Mrs. Noel Morss
Mrs. Stephen P. Mugar
Mrs. Alfred Peabody
Mrs. Harold Peabody
Mrs. Henri Prunaret
Mrs. Franklin A. Reece
Mrs. John R. Richardson
Mrs. Arthur L. Richmond
Mrs. Benjamin Sachs
Mrs. Ernest J. Sargeant
Mrs. Sullivan A. Sargent
Mrs. LeRoy A. Schall
Mrs. Charles L. Schepens
Mrs. Henry R. Scott
Mrs. Dwight B. Siscoe
Mrs. Reginald H. Smith
Mrs. Reginald H. Smithwick
Mrs. William B. Snow, Jr.
Mrs. Leslie Soule
Mrs. Channing S. Swan
Mrs. Thomas C. Thatcher, Jr.
Mrs. John E. Thayer
Mrs. Benjamin A. G. Thorndike
Mrs. Foster M. Trainer
Mrs. Robert Truesdale
Mrs. Frederick H. Verhoeff
Mrs. George Vinsonhaler
Mrs. Lyon Weyburn
Mrs. Andrew Winslow, Jr.
Mrs. Stewart C. Woodworth

HONORARY MEMBERS

Miss Sally Fairchild
Mrs. Harris P. Mosher

Department of Ophthalmology

Chief of Ophthalmology

Edwin B. Dunphy, M.D.

Consulting Chief of Ophthalmology

Frederick H. Verhoeff, M.D.

Surgeons in Ophthalmology

Paul A. Chandler, M.D.
William P. Beetham, M.D.
Virgil A. Casten, M.D.
Trygve Gundersen, M.D.
David G. Cogan, M.D.
Brendan D. Leahey, M.D.

Associate Surgeons in Ophthalmology

Hugh C. Donahue, M.D.
Mahlon T. Easton, M.D.

Assistant Surgeons in Ophthalmology

Albert E. Sloane, M.D.
Edward E. Covitz, M.D.
Paul G. Haire, M.D.
Garrett L. Sullivan, M.D.
S. Forrest Martin, M.D.
Thomas Cavanaugh, M.D.
Earl S. Seale, M.D.
A. William Collinson, M.D.
Carl C. Johnson, M.D.
Abraham Pollen, M.D.
Sumner D. Liebman, M.D.
Harry E. Braconier, M.D.
Henry A. Mosher, M.D.
Karl Riemer, M.D.
W. Morton Grant, M.D.
Charles H. McLaughlin, M.D.
Francis J. West, M.D.
Joseph M. Clough, M.D.

Assistants in Ophthalmology

Henry F. Allen, M.D.
D. Robert Alpert, M.D.
Frederic Breed, M.D.
Robert J. Brockhurst, M.D.
Julian F. Chisholm, Jr., M.D.
Thomas P. Cronin, M.D.
Knud K. Dreisler, M.D.
Edwin B. Goodall, M.D.
Warren D. Haley, M.D.
Linley C. Happ, M.D.
John M. Hill, M.D.
Joseph Lo-Presti, M.D.
Irwin T. Mancall, M.D.
Arthur M. Morrissey, M.D.
Bertha Offenbach, M.D.
Ichiro D. Okamura, M.D.
Irving Pavlo, M.D.
Richard B. Pippitt, M.D.
Charles D. Regan, M.D.
Paul A. Runge, M.D.
Charles L. Schepens, M.D.
David H. Scott, M.D.
William Stone, Jr., M.D.
Robert R. Trotter, M.D.
Bernard H. Zeavin, M.D.

Residents in Ophthalmology

S. James Bullington, M.D.
Richard B. Chapman, M.D.
David S. Johnson, M.D.
Merrill J. King, Jr., M.D.
Daniel F. Milam, M.D.
Frank A. Perreten, M.D.
Baruch Sachs, M.D.
Alfred W. Scott, M.D.
Raymond D. Sudarsky, M.D.
Neil F. Thorlaksen, M.D.

Special Fellows in Ophthalmology

Leona Zacharias, Ph.D.
Silvio R. Pirquet, M.D.

Consulting Surgeons in Ophthalmology

Merrill J. King, M.D.
Ralph H. Ruggles, M.D.
Benjamin Sachs, M.D.
Peter H. Thompson, M.D.
J. Herbert Waite, M.D.
Samuel Wilkins, M.D.

Consultant in Eye Pathology

Parker Heath, M.D.

Department of Otolaryngology

Chief of Otology and Laryngology

LeRoy A. Schall, M.D.

Surgeons in Otolaryngology

Robert L. Goodale, M.D.
Francis L. Weille, M.D.
Charles I. Johnson, M.D.
Maurice G. Evans, M.D.
Vincent J. Kelley, M.D.
Charles H. Allman, M.D.

Surgeon for Bronchoscopy and Esophagoscopy

John R. Richardson, M.D.

Surgeon for Tumor Clinic

Carl H. Ernlund, M.D.

Surgeon for Plastic Operations

Edgar M. Holmes, M.D.

Associate Surgeons in Otolaryngology

Walter J. E. Carroll, M.D.
John R. Frazee, M.D.
Joseph Lentine, M.D.
Burton E. Lovesey, M.D.
J. Charles Drooker, M.D.
Herman J. Sternstein, M.D.

Assistant Surgeons in Otolaryngology

Donald K. Lewis, M.D.
Elizabeth DeBlois, M.D.
Daniel Miller, M.D.
Calvin M. Cerrato, M.D.
Frank R. Schlossberg, M.D.
Bernard Zonderman, M.D.
Charles Kent, M.D.
Edward F. Lawlor, M.D.
John E. McKeigue, M.D.
Maurice Ruben, M.D.
Kenneth Kazanjian, M.D.

Assistant Surgeon for Plastic Operations

Aram Roopenian, M.D.

Assistants in Otolaryngology

Lawrence S. Hirsch, M.D.
Frederic McIntire, Jr., M.D.
George F. Reed, M.D.
William P. Rogers, Jr., M.D.
Morris Swartz, M.D.
John C. Trakas, M.D.
Richard C. Webster, Jr., M.D.
Anthony Zovickian, M.D.

Residents in Otolaryngology

Samuel C. Doyle, M.D.
Stuart M. Frame, M.D.
Louis D. Griffey, M.D.
Alfred P. Hurst, M.D. *(on leave of absence)*
Robert E. Klotz, M.D.
Jack Malkoff, M.D.
William W. Montgomery, M.D.
William Patterson, M.D.
Piero Perone, M.D.
Akira Sakudo, M.D.

Consulting Surgeons in Otolaryngology

Frederick L. Bogan, M.D.
Gustave B. Fred, M.D.
Joseph L. Goodale, M.D.
Edwards W. Herman, M.D.
Varaztad H. Kazanjian, M.D.
Moses H. Lurie, M.D.
Philip Mysel, M.D.
George H. Poirier, M.D.
Lyman G. Richards, M.D.
Harold H. Tobey, M.D.
D. Harold Walker, M.D.
Leon E. White, M.D.

Roentgenologist
A. S. Macmillan, M.D.

Anesthesiologist
Jesse F. Brown, M.D.

Director of Otolaryngological Pathology
Werner Mueller, M.D.

Research Associate
George Kelemen, M.D.

Director of Ophthalmic Pathology
David G. Cogan, M.D.

Bacteriologist
Anita Mangiaracine, A.B.

Research Virologist
Robert S. Gohd, Ph.D.

Assistant Ophthalmic Pathologist
Taylor R. Smith, M.D.
Toichiro Kuwabara, M.D.

Pediatrician
Allan M. Butler, M.S.

Assistant for Bronchoscopy and Esophagoscopy
Edward B. Benedict, M.D.

Consulting Physicians

Fuller Albright, M.D.
Joseph C. Aub, M.D.
Myles P. Baker, M.D.
Victor G. Balboni, M.D.
Walter Bauer, M.D.
Robert L. Berg, M.D.
Edward E. Bland, M.D.
Allen G. Brailey, M.D.
Walter S. Burrage, M.D.
John W. Cass, Jr., M.D.
Earle M. Chapman, M.D.
Richard W. Clark, M.D.
Milton H. Clifford, M.D.
Perry J. Culver, M.D.
Briant L. Decker, M.D.
Charles H. DuToit, M.D.
Daniel S. Ellis, M.D.
Dana L. Farnsworth, M.D.
John H. Fay, M.D.
Anne P. Forbes, M.D.
Allan L. Friedlich, Jr., M.D.
Harriet L. Hardy, M.D.
Reed Harwood, M.D.
Bernard M. Jacobson, M.D.
Chester M. Jones, M.D.
Alfred Kranes, M.D.
Alexander Leaf, M.D.
Jacob Lerman, M.D.
Janet W. McArthur, M.D.
John P. Monks, M.D.
Gordon S. Myers, M.D.
Robert S. Palmer, M.D.
Arthur S. Pier, Jr., M.D.
Helen S. Pittman, M.D.
Marion W. Ropes, M.D.
David D. Rutstein, M.D.
Charles L. Short, M.D.
Howard B. Sprague, M.D.
John B. Stanbury, M.D.
George P. Sturgis, M.D.
Thomas A. Warthin, M.D.
Arthur L. Watkins, M.D.
Roy R. Wheeler, M.D.
Conger Williams, M.D.
Paul C. M. Zamecnik, M.D.
John W. Zeller, M.D.

Consulting Dermatologists

John Adams, Jr., M.D.
Chester N. Frazier, M.D.
William R. Hill, Jr., M.D.
Walter F. Lever, M.D.
Mildred Ryan, M.D.
Maurice M. Tolman, M.D.
Robert F. Tilley, M.D.

Consulting Pathologists

William J. Brickley, M.D.
Benjamin Castleman, M.D.
David Kahn, M.D.
Michael A. Luongo, M.D.
Winfield S. Morgan, M.D.
Robert E. Scully, M.D.
Donald C. Sniffen, M.D.
Edgar B. Taft, M.D.
Austin L. Vickery, Jr., M.D.

Consulting Radiologists

John F. Gibbons, M.D.
Joseph Hanelin, M.D.
Laurence L. Robbins, M.D.
Milford D. Schulz, M.D.
Richard V. Wilson, M.D.
Stanley M. Wyman, M.D.

Consulting Bacteriologist

Louis Dienes, M.D.

Consultant in Contagious Disease

Edwin H. Place, M.D.

Consultant in Preventive Medicine

John E. Gordon, M.D.

Consultant in Pharmocology

Otto Krayer, M.D.

Consulting Urologists

Sylvester B. Kelley, M.D.
Walter S. Kerr, M.D.
Wyland F. Leadbetter, M.D.
Howard I. Suby, M.D.
Lorande M. Woodruff, M.D.

Consulting Neurologists

John A. Abbot, M.D.
Raymond D. Adams, M.D.
Madeline R. Brown, M.D.
G. Colket Caner, M.D.
Edwin M. Cole, M.D.
Charles M. Fisher, M.D.
Vincent P. Perlo, M.D.
Edward P. Richardson, M.D.
Robert S. Schwab, M.D.
Maurice Victor, M.D.

Consulting Psychiatrists

Herbert Barry, Jr., M.D.
Gaston E. Blom, M.D.
Daniel C. Dawes, M.D.
Volta R. Hall, M.D.
Paul Howard, M.D.
John C. Nemiah, M.D.
Lucie J. Jessner, M.D.
Erich Lindemann, M.D.
Alfred O. Ludwig, M.D.
Gardner C. Quarton, M.D.
Avery D. Weisman, M.D.
LeMoyne White, M.D.
Vernon P. Williams, M.D.
Elizabeth Zetzel, M.D.

Consulting Pediatricians

Frederic M. Blodgett, M.D.
T. Berry Brazelton, M.D.
Leo B. Burgin, M.D.
Albert Cohen, M.D.
Allen Cohen, M.D.
John D. Crawford, M.D.
Ralph W. Daffinee, M.D.
John A. V. Davies, M.D.
William A. Dickson, M.D.
Edward C. Dyer, M.D.
LeRoy L. Eldredge, Jr., M.D.
Robert N. Ganz, M.D.
William F. Ketchum, M.D.
Joseph L. Lewis, M.D.
Arthur J. Linenthal, M.D.
Francis C. McDonald, M.D.
Alexander S. Nadas, M.D.
William Pferrer, M.D.
Gertrud C. Reyersbach, M.D.
Ralph A. Ross, M.D.
Clement A. Smith, M.D.
Nathan B. Talbot, M.D.
Richard C. Tefft, M.D.
Wilhelmina VanDyke, M.D.
Louis Weinstein, M.D.
Elenore C. Zaudy, M.D.

Consulting Surgeons

Marshall K. Bartlett, M.D.
Bradford Cannon, M.D.
Edward D. Churchill, M.D.
Oliver Cope, M.D.
Gordon A. Donaldson, M.D.
Ward I. Gregg, M.D.
Edward Hamlin, Jr., M.D.
E. Parker Hayden, M.D.
Francis M. Ingersoll, M.D.
Robert R. Linton, M.D.
John B. McKittrick, M.D.
Horatio Rogers, M.D.
Gordon Scannell, M.D.
Fred A. Simmons, Jr., M.D.
Richard H. Sweet, M.D.
Grantley W. Taylor, M.D.
Howard Ulfelder, M.D.
Claude E. Welch, M.D.

Consulting Neurosurgeons

H. Thomas Ballentine, Jr., M.D.
William H. Sweet, M.D.
James C. White, M.D.

Consulting Orthopedists

Otto E. Aufranc, M.D.
Joseph S. Barr, M.D.
Thomas F. Broderick, Jr., M.D.
Thornton Brown, M.D.
Edwin F. Cave, M.D.
Robert J. Joplin, M.D.
Paul L. Norton, M.D.
Eugene Record, M.D.
John A. Reidy, M.D.
Carter Rowe, M.D.

Service Pins

Service Pins were awarded this year, for the first time, to the following members of the medical staff who have served 25 consecutive years on the active staff:

Frederick L. Bogan, M.D.
Paul A. Chandler, M.D.
Edmund W. Clap, M.D.
Edwin B. Dunphy, M.D.
Carl H. Ernlund, M.D.
Maurice G. Evans, M.D.
Robert L. Goodale, M.D.
Edwards W. Herman, M.D.
Charles I. Johnson, M.D.
Varaztad H. Kazanjian, M.D.
Moses H. Lurie, M.D.
Alexander Macmillan, M.D.
Philip E. Meltzer, M.D.
Harris P. Mosher, M.D.
George H. Poirier, M.D.
Ralph H. Ruggles, M.D.
Benjamin Sachs, M.D.
LeRoy A. Schall, M.D.
Frederick H. Verhoeff, M.D.
D. Harold Walker, M.D.
Francis L. Weille, M.D.

Anita Mangiaracine
Bacteriology — 20 years

Mrs. Belle Roberts
Housekeeping — 20 years

Madeline Shipsey
Social Service — 10 years

Annie Campbell
Nursing — 10 years

Dorothy Campanella
Dietary — 10 years

Alice Wallace
Nursing — 10 years

The Clinics

Assistant Director in charge of Clinics . . . . E. Michael White
Executive Officer . . . . Ruth Farrissey, R.N.

EYE CLINIC
- Ocular Motility Clinic
- Refraction Department
- Retina Service

EAR, NOSE AND THROAT CLINIC
- Hearing Test Room
- Consultation: Allergy Clinic
  - Plastic Clinic
  - Tumor Clinic

Howe Laboratory of Ophthalmology

Director
David G. Cogan, M.D.

W. Morton Grant, M.D.
David D. Donaldson, M.D.
Jin H. Kinoshita, Ph. D.
Robert R. Trotter, M.D.
Toichiro Kuwabara, M.D.
Harold L. Kern, Sc.D.

Winthrop Foundation and Clinic for the Deaf

Surgeon in Charge
Philip E. Meltzer, M.D.

Associate Surgeon
Donald K. Lewis, M.D.

Assistant Surgeon
Bernard Zonderman, M.D.

Executive Committee

Chairman
D. Harold Walker, M.D.

LeRoy A. Schall, M.D.
Harold G. Tobey, M.D.
Moses H. Lurie, M.D.
Philip E. Meltzer, M.D.

Retina Foundation

Director
Charles L. Schepens, M.D.

Associate Director
Endre A. Balazs, M.D.

Marie A. Jakus, Ph.D.
Laszlo Varga, Ph.D.
Gordon L. Brownell, Ph.D.
Robert J. Brockhurst, M.D.
Natalie H. Mayer, Ph.D.
Arthur F. Howe, Ph.D.
John Gergely, M.D., Ph.D.
Ichiro D. Okamura, M.D.
Charles V. Mahlmann, M.S.

Boston Eye Bank Serving New England

Executive Committee

Edwin B. Dunphy, M.D.
Henry Hixon Meyer
Brendan D. Leahey, M.D.
William S. Ballard
Mrs. John B. Eliot

General Director: Garrett L. Sullivan, M.D.

Executive Secretary: Mrs. William A. Slade, Jr.

Administration

Director	Francis S. Hill
Assistant Director	Mrs. Geneva L. Wayland, R.N.
Administrative Assistants, Admitting Office	Ruth W. Hutchinson, R.N. Walborg L. Peterson, R.N. Henrietta Olsen, R.N. Mrs. Ethel M. Devine, R.N.

Nursing Department

Director; Nursing Service and Nursing School	Mrs. Althea Brady, R.N.
Director of Nursing Education	Mary E. Shepard, R.N.

Directors of Departments

Accounting	Raymond W. Lyons
Dietary	Patricia Walsh
Housekeeping	Roscoe Adams
Medical Social Service	Isabel Whiting
Occupational Therapy	Mrs. Patricia Huddleston
Optical Shop	Albert E. Maver
Public Relations	Mrs. Virginia Gerould

Directors of Affiliated Departments

Advisor to Director of Nursing Service, Training School	Ruth Sleeper, R.N.
Clinics, Assistant Director	E. Michael White
Coordinating Comptroller	Lawrence Martin
Department of Dietetics, School of Dietetics Director	Louise Hatch
Maintenance	Raymond V. Kinsman
Medical Records	Alice Merrill
Personnel Department Director	Edmund R. Mattos
Pharmacy	John Murphy

Directors of Units

Librarian	Charles Snyder
Patients' Accounts	Margaret Meenan, R. N.
Volunteers	Mrs. William A. Slade, Jr.

Report of the Board of Managers

The ten-year program of reconstruction instituted by the Infirmary in 1949 is proceeding according to plan. Two major steps are now in process: The renovation of the basement area which will be completed shortly and the construction of the Research Center, consisting of three floors on top of the Clinic Building on Fruit Street, scheduled for completion about November first.

As soon as possible thereafter the first floor of the hospital will be rearranged to provide improved administrative quarters, adequate waiting space, emergency treatment rooms and other necessary facilities. At the same time, we hope to build a new main entrance on Charles Street designed to overcome the difficult and unsatisfactory conditions which have existed for so many years.

In the near future, the Infirmary must undertake, as the final phase of the ten-year program, plans for the expansion of private and semi-private accommodations for which the demand is pressing.

GENEROUS SUPPORT

The Managers are eternally grateful for the generous contributions received by the Infirmary from friends, foundations and the Federal Government towards the cost of all this work. Had it not been for that support, the Managers could not have undertaken the program which was so necessary to assure the future of the Infirmary as one of the leaders in its special field. A fine start has been made. The Infirmary will continue its efforts to raise by gifts, the balance of the cost so that its unrestricted capital funds, which must now be drawn upon, will not be depleted permanently.

Since the last Annual Report, two important gifts in the Research Center have been received: A laboratory from the Mason-Neilan Regulator Company in memory of its founder, Mr. William Alexander MacLeod; and the Adolph Ehrlich Pathological Laboratory presented by Mrs. Adolph Ehrlich as a memorial to her husband.

From time to time in the past, we have explained that the Infirmary and the Massachusetts General Hospital are entirely separate institutions, each with its own medical staff, its own property and capital funds and its own administrative officers. Nevertheless the mistaken idea persists that the two are one and the same. This is understandable and due in large measure to the close cooperation which exists between the two. The Clinic Departments are operated together, the buildings are connected physically, the members of the two medical staffs assist each other and the administrative officers maintain close liaison. Both institutions and their patients profit enormously from this association. We wish to record our deep appreciation for all the favors and assistance which our great sister institution renders to us.

The ultimate responsibility for the administration of the Infirmary rests with the members of the Corporation who elect twelve members of the Board of Managers, the other two members of the board being appointed annually by the Governor of the Commonwealth. The members of the Corporation also elect the Treasurer and Secretary from members of the Board of Managers. The Board in turn elects the President and appoints an Executive Committee, various other committees, the Director and the Chiefs of the two services of Ophthalmology and Otolaryngology.

Members of the Staff of the grade of Assistant Surgeon and higher are appointed by the Executive Committee. The Director and the Chiefs of the two services devote their entire time to the affairs of the Infirmary. Individually in their own fields or in consultation with each other when joint action is desirable, they consider and pass upon daily problems of administration and patient care. They attend the meetings of the Corporation and Board of Managers and are voting members of the Executive Committee. Thus they take an active part in determination of policy and are conversant with the thoughts and aspirations of the members of the Corporation and Board of Managers. Accordingly it is appropriate that the reports of the Director and the Chiefs which follow should, as they do, record the events which have occurred in their respective fields and the problems with which they are faced.

Henry Hixon Meyer,
President

Treasurer's Report

AUDITORS' CERTIFICATE

We have examined the balance sheet of Massachusetts Eye and Ear Infirmary as at October 3, 1954 and the related income account for the period ended at that date (52 weeks).

Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The accompanying statements reflect, for the first time, a provision for depreciation in the amount of $90,000, based on a percentage of the patient care expenses of the Infirmary. This provision has been recorded in accordance with the requirements of statutory authority pertaining to per diem reimbursement for hospital services rendered under contract with certain third party agencies. We are unable to express an opinion as to the adequacy of the provision for depreciation in relation to plant costs.

Subject to the exception noted above, in our opinion, the accompanying balance sheet and the related income account present fairly the financial position of Massachusetts Eye and Ear Infirmary at October 3, 1954 and the results of its operations for the period ended at that date, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding period except as to depreciation.

Patterson, Teele & Dennis

INCOME ACCOUNT

FOR THE PERIOD ENDED OCTOBER 3, 1954 (52 WEEKS)

Hospital Income as per Director's Report			$1,283,560.04
Less: Hospital operating expenses as per Director's report*		$1,637,446.08	
Hospital operating expenses charged directly against Permanent Funds		28,369.00	
		$1,665,815.08	
Deduct: Hospital operating expenses charged directly against Permanent Funds:			
Permanent Funds — Income	$12,345.82		
Permanent Funds — Principal	16,023.18	28,369.00	
Net Hospital Expenses			1,637,446.08
Excess of Hospital Expenses over Hospital Income			$ 353,886.04
Income from investment securities, less income applicable to Restricted Funds		$ 176,500.19	
Receipts from United Community Services, Committee of the Permanent Charity Fund, Inc., Estates of Elisha V. Ashton, G. Gorham Peters and others		64,508.66	
		$ 241,008.85	
Less: Treasurer's Disbursements		11,602.02	229,406.83
Excess of Expenditures over Income			$ 124,479.21
Deduct: Income Reserve provided in prior year applied			25,000.00
Deficit for the Period			$ 99,479.21

* Includes provision for depreciation — $90,000.

Balance Sheet

OCTOBER 3, 1954

ASSETS

Cash in Bank and on Hand		$ 383,591.21
Investments — book value:		
Securities	$4,063,404.54	
Interest in parcel of real estate	1.00	
Interest in unsettled estate	1.00	4,063,406.54
Accounts receivable:		
Patients — less reserve for doubtful accounts	$ 84,619.44	
Miscellaneous	7,763.00	92,382.44
Inventories of supplies, etc.		20,575.98
Plant:		
Land and buildings acquired prior to January 1, 1949 (book value)	$ 491,741.99	
Additional facilities acquired since January 1, 1949 (cost)	818,354.20	
	$1,310,096.19	
Less reserve for depreciation	90,000.00	1,220,096.19
Construction in progress		162,277.26
TOTAL		$5,942,329.62

LIABILITIES AND FUNDS

Advances from patients	$ 2,128.97
Accounts payable and accruals	86,350.05
Special Funds	(75.68)
General Fund	2,854,008.37
Research Fund	20,000.00
Permanent Funds — Income Restricted	674,505.52
Permanent Funds — Income Unrestricted	2,198,927.50
Special Purpose Funds	79,499.11
Unexpended Restricted Income of Permanent Funds	26,985.78
TOTAL	$5,942,329.62

SUMMARY OF INVESTMENTS

	*Book Value**	*Market Value**	*% Market Value*
BONDS:			
U.S. Government	$1,218,990	$1,238,402	22.2%
Canadian Government	48,572	51,300	.9%
Railroad	232,491	230,130	4.1%
Public Utility	85,982	85,762	1.6%
Industrial	128,852	133,982	2.4%
Financial	73,792	74,440	1.3%
Miscellaneous	1,000	1,000	—%
TOTAL BONDS	$1,789,679	$1,815,016	32.5%
PREFERRED STOCKS:	$ 160,012	$ 188,569	3.4%
COMMON STOCKS:			
Railroad	$ 170,355	$ 301,850	5.4%
Public Utility	425,563	596,720	10.7%
Industrial	851,772	1,729,433	31.0%
Bank, Insurance & Miscellaneous	555,047	806,139	14.4%
Investment Trust	25,000	38,400	.7%
TOTAL COMMON STOCKS	$2,027,737	$3,472,542	62.2%
TOTAL GENERAL FUND	$3,977,428	$5,476,127	98.1%
WINTHROP FUND	75,876	96,495	1.7%
WEBER FUND	10,100	9,983	.2%
GRAND TOTAL	$4,063,404	$5,582,605	100.0%

* Cents omitted.

OPERATING ANALYSIS

FOR THE PERIOD ENDED OCTOBER 3, 1954 (52 WEEKS)

Income from Patients	$1,380,104.20
Income from Other Sources	57,903.48
TOTAL GROSS HOSPITAL INCOME	$1,438,007.68
Allowances to Patients for "free care"	$ 97,412.06
Further Deductions for Bad Debts	19,469.99
Allowances to Blue Cross and Other Agencies	37,565.59
TOTAL FREE SERVICE	$ 154,447.64
NET INCOME	1,283,560.04
Salaries and Wages	$ 889,911.91
Supplies and Expenses	446,504.98
Clinic Expenses	180,682.77
Extraordinary Expenses	30,346.42
TOTAL OPERATING EXPENSES	$1,547,446.08
DEPRECIATION	90,000.00
HOSPITAL DEFICIT	263,886.04
TOTAL HOSPITAL DEFICIT	$ 353,886.04

HORACE W. FROST,
Treasurer

Gifts and Grants for Special Purposes

The Massachusetts Eye and Ear Infirmary is grateful for all gifts, large and small. We appreciate the thoughtful friends who send glasses no longer used, the grateful patient who leaves a few dollars to help others, and the loyal supporters who give generously year after year. But because of space limitations, only financial gifts of $50 or more, donated for special purposes during the past fiscal year, are listed here.*

BOSTON EYE BANK FUND

John R. Coffin	$ 315.00	
Mrs. Frederick Leviseur	50.00	
Charles I. Travelli Fund	2,000.00	
Other gifts	375.00	
		$ 2,740.00

EYE BANK RESEARCH FUND

Mrs. Thomas Cummins	$ 1,000.00

CHRISTMAS FUND

Ladies Visiting Committee	$ 158.00	
Estate of Lotta Crabtree	100.00	
		$ 258.00

CURED CANCER CLUB FREE BED FUND

Cured Cancer Club	$ 1,353.61

DEAN FUND FOR LITTLE CHILDREN

Dean Foundation for Little Children	$ 800.00	
Dean Welfare Trust	700.00	
		$ 1,500.00

DE BLOIS MEMORIAL FUND

Dr. Elizabeth De Blois	$ 5,000.00

DR. DUNPHY TESTIMONIAL FUND

Dr. T. Alan Devan	$ 100.00	
Mrs. G. Peabody Gardner	500.00	
Dr. Benjamin Sachs	500.00	
		$ 1,100.00

ESOPHAGEAL VOICE CANCER FUND

American Cancer Society, Mass. Div.	$ 4,800.00

GINGER ALE FOR ESOPHAGEAL CLASSES

Atlantic & Pacific Tea Co.	$ 100.00

HEARING AID FUND

Neal Rantoul Fund	$ 1,200.00	
Albert Stone, Jr.	1,000.00	
		$ 2,200.00

MOSHER LABORATORY FUND

Dr. Samuel Cline	$ 100.00	
Godfrey M. Hyams Trust	2,500.00	
Tiological Meetings refund	162.39	
		$ 2,762.39

OCCUPATIONAL THERAPY FUND

Ladies' Visiting Committee	$ 250.00	
Mr. & Mrs. Kenneth E. Gleason	50.00	
		$ 300.00

ORTHOPTIC INSTRUMENTS FUND

Mrs. Kathleen Barbot	$ 100.00

OTOSCLEROSIS FUND

Mr. & Mrs. Jack Shore	$ 250.00

PATIENTS FUND

Agoos Family Charity Fund	$ 100.00	
Alfred Archambault	110.50	
Mrs. Taylor Black	100.00	
Arthur Chandler	50.00	
Estate of Lotta Crabtree	200.00	
Grosberg Family Charity Fund	100.00	
Mass. Charitable Fire Society	75.00	
Other gifts	2.13	
		$ 737.63

PREMATURE BABY FUND

Charles Amsterdam	$ 500.00

RETINA SERVICE INSTRUMENTS FUND

Charles Irwin Travelli Fund	$ 1,500.00

SOCIAL SERVICE FUND

Ladies' Visiting Committee	$ 250.00	
Permanent Charity Fund	850.00	
		$ 1,100.00

SOCIAL SERVICE CANCER FUND

American Cancer Society, Mass. Div.	$ 1,000.00

DR. WM. STONE, JR., RESEARCH FUND

Boston Aid to the Blind	$ 50.00	
Sarah A. Hyams Fund	5,000.00	
National Society for the Prevention of Blindness	1,529.00	
Miss Amelia Peabody	507.90	
Perkins Institution Alumni Society	75.00	
Workshop for the Blind	120.00	
		$ 7,281.90

NELSON WEEKS FUND

Permanent Charity Fund	$ 1,500.00

DR. WEILLE FUND

Anonymous	$ 1,000.00	
Miss Amelia Peabody	5,115.69	
Other gifts	10.00	
		$ 6,125.69

WINTHROP FOUNDATION RESEARCH FUND

Frederic Winthrop	$ 5,000.00

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* Not including the Research Center building fund.

Comparative Statistics

HOSPITAL

	1953	1954
Ward Patients — Eye Cases	1,742	1,548
Ear, Nose, and Throat Cases	1,322	1,277
Total admitted to Wards	3,064	2,825
Private Patients — Eye Cases	1,979	2,155
Ear, Nose, and Throat Cases	1,747	1,978
Total Private Patients	3,726	4,133
TOTAL PATIENTS ADMITTED	6,790	6,958
Operations, Ward Patients — Eye Cases	1,534	1,449
Ear, Nose, and Throat Cases	1,095	1,030
Operations, Private Patients — Eye Cases	2,070	2,338
Ear, Nose, and Throat Cases	1,601	1,743
TOTAL OPERATIONS	6,300	6,560

CLINICS

New Patients — Eye Clinic	5,823	5,845
Ear, Nose, and Throat Clinic	3,209	3,132
TOTAL NEW PATIENTS	9,032	8,977
Revisits — Eye Clinic	35,341	35,361
Ear, Nose, and Throat Clinic	17,931	17,589
TOTAL CLINICAL REVISITS	53,272	52,950
Visits — Eye Clinic	41,164	41,206
Ear, Nose, and Throat Clinic	21,140	20,721
TOTAL CLINICAL VISITS	62,304	61,927
Emergency Patients Admitted to Hospital	234	180
Patients Admitted to Emergency Ward	4,539	4,312

Comparative Statistics

	1953	1954
Patient Days Care—Wards	22,639	21,029
Private	22,274	25,050
TOTAL PATIENT DAYS CARE	44,913	46,079
Average Number of Patients Treated Daily—Wards	62	58
Private	61	69
TOTAL AVERAGE TREATED DAILY	123	127
Average Number of Days Patients Remain—Wards	7+	7+
Private	6	6
Beds Available and Percent of Occupancy—Wards	104 60%	101 57%
Private	73 82%	89 77%
TOTAL BEDS AVAILABLE	177	190
Per Capita Cost Per Day—Wards, Routine Care	$17.59	$17.36
Special Services	5.82	6.30
TOTAL COST PER DAY PER WARD PATIENT	$23.41	$23.66
Per Capita Cost Per Day—Semi-Private, Routine Care	$15.61	$19.19
Special Services	7.60	8.90
TOTAL COST PER DAY PER SEMI-PRIVATE PATIENT	$23.21	$27.09*
Per Capita Cost Per Day—Private, Routine Care	$18.17	$24.53
Special Services	5.35	5.40
TOTAL COST PER DAY PER PRIVATE PATIENT	$23.52	$29.93*
Condition of Ward Patients on Discharge—Died	10	11
Autopsies	70%	64%
Left Against Advice	0	0
Discharged	3,050	2,829
Percentage of "Free Care"—Compiled on Dollar Value, not including Blue Cross:		
House Patients	7.2%	5.1%
Out-Patients	25.7%	26.0%
TOTAL "FREE CARE"	10.2%	9.7%

* With Depreciation Added.

Report of the Director

For the first time since 1948, the Infirmary has embarked on a major building program again. By far the most stimulating event of the past year was the signing of the contract for construction of the Research Center. Actual construction began during the latter part of July and completion is anticipated by the early fall of 1955.

The Center will consist of three floors to be added to the present "Connecting Building" located between the Infirmary and the MGH Clinic Building. After a great deal of thought and with the cooperation of the MGH, this location was chosen because of its proximity to the Infirmary clinics and accessibility to the rest of the hospital.

The importance of this building program cannot be overemphasized. It will provide, for the first time, space for the research and teaching which contributes so much to improved care of all our patients.

REMODELING CONTINUES

Construction and renovation in other parts of the hospital also progressed during the year. The addition of about 1000 square feet of space on the Clinic Building directly adjacent to the Eye Clinic was completed and immediately occupied by the rapidly growing Retina Service. This major addition, costing $45,000, gave relief to a patient service hopelessly congested in its former quarters.

Renovations in the main kitchen and the construction of a dishwashing room opposite the cafeteria were also completed. Contracts have been signed for further modernization and tiling of the basement and work will begin immediately.

This remodeling continues the integrated program for physical improvement of the hospital started several years ago. Completion of the program is now in sight, as the only area still to be done is the first floor which must wait until the laboratories, now occupying a large part of the floor, are moved into the new Research Center. Included in these changes will be plans for modernizing the front entrance.

IMPROVED CLINIC SERVICE

In the Clinic area a major face lifting has been accomplished. New asphalt tile floors were laid, the lighting improved, and new and comfortable furniture replaces the antiquated benches which have been in use for so long. These redecorations have made a vast improvement in the atmosphere of this active area and are in keeping with the increasing emphasis on ambulatory patients which will be reflected in the general health of the community.

Paralleling these physical improvements, preliminary studies are in progress to set up an appointment system in the various clinics designed to expedite patient care and eliminate, as far as possible, the periods of waiting which have been all too frequent in the past. As the year ended, plans were well advanced to start the appointment system in the Eye Clinic. This would be done gradually, one day at a time and then expanded to other days as the personnel become familiar with the procedures. Many technical difficulties will have to be solved before the plan is working smoothly in all clinics.

Another innovation was changing the name of the department to "The Clinics of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary." It was felt that this name more clearly defines the new concept of ambulatory care.

EXPENSIVE NEW EQUIPMENT

In the modern hospital, the administrator is constantly faced with pressure for new and always expensive equipment. This year was no exception. Equipment costing in the vicinity of $1,000 each included three additional operating room tables, to save time between operations, an ECG machine to take electrocardiagrams, thus eliminating the necessity of borrowing from the MGH, and a technicon for the two pathology laboratories. This latter machine enables the laboratories to give a much quicker report on pathological specimens.

In the X-Ray Department, a stratograph body section device was donated by the Ladies Visiting Committee. It allows us to take laminograms of the esophagus to show the depth of the lesion. Formerly patients had to be sent to the MGH for such pictures. Also, a galvanic skin-resistance audiometer has been added to the hearing test room. In conjunction with Boston University, this equipment is being used in the evaluation of hearing in pre-school deaf children. On completion of the new hearing test room in the Research Center, it will be moved to that location.

A FIGURE FOR DEPRECIATION

As shown in the Treasurer's report, a figure for depreciation was carried for the first time on the books of the Infirmary. To a large extent, it was this item which brought about the substantial deficit of $99,000 reported for the year ending October 3, 1954. When analyzed, however, the total picture is not so awesome as it first appears. The deficit from operations before depreciation was $34,000, which figure included expenditures for renovations and special equipment amounting to $30,000. To partially offset this loss, a reserve of $25,000 was carried over from the previous year, in anticipation of the higher costs due to increased wages. This 1953 reserve was applied against the 1954 deficit, leaving $9,000 to be taken from capital. Depreciation was not funded.

Anticipating higher costs in the 1955 budget, rates were increased in October for the first time since 1951. Ward rates went from $14 to $15 for routine services; semi-private from $16 to $18; and private from $19-$24 to $21-$30. After reviewing ancillary rates, only scattered revisions were made. Before changing rates, a study was made of rate policies in surrounding hospitals, and it was found that our increased charges are comparable to those of similar teaching institutions.

During the past year, the cost per patient day continued to rise at an accelerated rate:

	1952	1953	1954
Routine Services	$17.27	$17.12	$19.58
Special Services	5.91	6.25	6.92
	$23.18	$23.37	$26.50

Translated into dollars and cents to the patient, the average bill per hospital visit now comes to $151.48, an increase of $6.72 over the previous year. The three major reasons for the increase were a substantial increase in wages, the 40-hour week which necessitated more personnel to cover the hospital around the clock, and lower occupancy.

CHANGING DEMAND FOR BEDS

Although I mentioned the trend from ward to private care in some detail in my report last year, I feel it is of enough significance to call attention to it again. For several years, ward occupancy has been falling, not at a rapid rate but nevertheless as an unmistakable trend. At the same time, the private and semi-private patient days have been increasing at about the same rate, as illustrated by the following figures:

	1952	1953	1954
Ward	23,397	22,639	21,029
Semi-private & Private	19,619	22,274	25,050
	43,016	44,913	46,079

This year for the first time, the number of private patients has exceeded those on the wards of the hospital. Ward occupancy was reduced to 57% for the 12 months just ended.

Two years ago, we segregated by a partition six beds in the ward area of the Ear, Nose and Throat section on the second floor, for the use of either semi-private or ward patients as the need might demand. This experiment has worked so well that we are now in the process of following the same procedure in the Eye Ward on the second floor. In these areas, it is understood that service cases will have priority during the periods of high occupancy.

At the same time, visits to the Clinics, which feed the wards, have also been declining although not so rapidly.

	1952	1953	1954
Clinic visits	63,559	62,304	61,927

With the rapid increase in hospital insurance, there is every reason to believe this trend will continue, and if it does, the Infirmary will be faced with the problem of converting more teaching beds to semi-private use.

MEETING RISING COSTS

Successive years of rising costs mean that every effort must be made to operate efficiently and economically. Classes in work simplification were held throughout the year, with representatives from nearly all departments participating. Although the program is still young, there is tangible evidence that time has been saved by the more efficient procedures worked out by the personnel.

Along with work simplification, job training in certain areas is being developed. At the present time, a course of instruction is given to the ward secretaries to assist them in finding more ways to relieve the head nurses on the floors from all duties that might safely be done by trained lay personnel. Every possible idea to meet the continuing nursing shortage is constantly being explored.

Increasingly rapid turnover resulting from progressively shorter patient stay and from removal of the retina beds to Baker, have prompted us to review our admitting procedures, to develop the most efficient policies. One step in this direction put into operation during the year is a three-way telephone connection by means of which the doctor's secretary can talk not only to the admitting officer but also to the operating room secretary. Through this hook-up, operations are booked in the operating room at the same time the patient's room is booked in the admitting office, one being coordinated immediately with the other. This has made the operating room schedule considerably more efficient, as illustrated by the number of operations performed during the past year:

	1952	1953	1954
Total operations	5,996	6,300	6,560

In the development stage is a pre-admission questionnaire which will be sent to patients before they come to the hospital. When filled in by the patient and returned, it will expedite the admission interview and reduce the time spent with the admitting officer.

With the same objectives, a new department was formed under the name of "Patients' Accounts," to take over responsibility for credit and collections and the processing of insurance forms. Formerly these procedures were divided between the bookkeeping, the admitting and the secretarial departments. With the increase in third-party payments, the expeditious handling of forms has become a time-consuming and increasingly expensive clerical undertaking. The new set-up both helps the patients interpret their various insurance policies and also insures prompt third-party payments.

NEW PUBLICATIONS

A news bulletin, edited by the Public Relations Department, was sent this year to the Managers, the Staff, Alumni, all personnel and certain loyal friends. The purpose of the new bulletin is to keep these groups informed of new developments, both medical and administrative.

The Bulletin supplements the several pamphlets written for our patients, to describe the various services of the hospital. New this year was a folder for patients with detached retina. Other such folders that are brought up to date and reprinted each year are the admissions booklet giving general information important to all new patients, "The First Operation," to assist parents in preparing the child for his first hospital experience, a similar one for children with cross-eyes, and another explaining the importance of regular treatment for glaucoma.

NURSING DEVELOPMENTS

We are still having difficulty finding enough graduate nurses to cover the hospital comfortably. This is, in some measure, the result of the change to the 40 hour week and is most pronounced on the evening and night shifts.

Further progress has been made in relieving the nurses of duties which could be performed by lay personnel. For example, the Dietary Department has taken over the responsibility of meal-time trays on the private floors rather than leaving this to the nurses, as previously.

We have also increased the number of nurses' aides. At the present time, we have a group of 42 aides and 19 orderlies. It is encouraging that the turnover in this group has been reduced and the present personnel are experienced and relatively stable. It is because of the early ambulation of the majority of our patients that it has been possible and advantageous for the Infirmary to have a higher percentage of aides and orderlies than in the average general hospital. For this reason, on several of our units the hours per patient day for aides and orderlies exceeds those of graduate nurses.

During the year, four affiliating nursing schools have discontinued sending us student nurses which has reduced to 133 the number of nursing students rotating through the Infirmary School for the 28 day training period. Fortunately, the three month graduate school continues with approximately the same number—12, as in previous years.

It is also interesting that an increasing number of foreign nurses are coming to us for specialized training. During the year, we had representatives from England, Norway, Belgium and Switzerland. These nurses, most of them at the supervisory level in their own country and interested in teaching when they return, are stimulating to work with and often make constructive contributions to our own nursing procedures.

FURTHER EXPANSION

The rapidly increasing number of retina patients referred to Occupational Therapy and more recently the feeling of the medical staff that our long-stay laryngectomy patients would benefit by being included in the occupational therapy program have made it seem advisable to add a third therapist to the staff. The Department is also cooperating in the special projects program initiated by the Boston School of Occupational Therapy, to improve procedures and broaden understanding of the patients' problems.

As soon as the laboratories and library have been moved into their new quarters in the Research Building, we will be remodelling this area on the first floor, the planning of which was well underway at the end of the year. One of the big problems in modernizing the first floor is devising some plan for the front entrance. For several years our architects have tried to come up with some practical plan to eliminate the steep entrance stairs and the difficulty of opening the door against the prevailing and often strong west wind. When the Infirmary has finished reconstructing the main floor and solved the problems of the front entrance, the renovations which started ten years ago will be virtually completed.

FRANCIS S. HILL,
Director

Department of Ophthalmology

SINCE the last report, there have been several important changes on the Ophthalmic Staff. Dr. Benjamin Sachs and Dr. Merrill King, two of our Chief Surgeons, have retired from active duty and have joined the Consulting Staff. They have given long years of service to the Infirmary and will be greatly missed. Their places have been taken by Dr. David Cogan and Dr. Brendan Leahey, who have come up through the various grades over a period of years to their present rank of full surgeon.

Another great change was occasioned by the retirement of Dr. Parker Heath as Director of the Pathology Laboratory. Dr. Heath came to us on a full-time basis in 1947 and during his regime many changes took place in this department. He contributed greatly to the teaching of residents and was in charge of postgraduate instruction at the Harvard Medical School. He has now been appointed Consulting Pathologist. Dr. Cogan has taken his place as Director of the Laboratory, with Dr. Taylor Smith and Dr. Toichiro Kuwabara as Assistant Pathologists.

The expanding activities of the Infirmary have brought about new construction. The Retina Service quarters have been greatly enlarged by extending them out over the roof of the clinics admitting area. At the same time, new dark rooms have been installed for the Harvard teaching room and all new units air conditioned.

The new research floors are now under construction. The Howe Laboratory will occupy one floor of this new building. Service laboratories such as pathology, bacteriology and blood chemistry will also be housed here, as well as the new library.

SERVICE TO PATIENTS

Some years ago, in a previous Annual Report, I pointed out that the three basic functions of the ophthalmic service were: (1) care of patients; (2) training of young ophthalmologists, and (3) ophthalmic research. I believe we have fulfilled these functions in a creditable way.

Insofar as patient care is concerned, we continue to render the best service available. The decline in eye patients in the clinic during the past few years seems to have come to an end. The various departments connected with the Eye Clinic have had a busy year.

The Refraction Department did over 8,000 refractions, the clinic being conducted in the usual manner by Dr. Albert Sloane. Certain new instruments and techniques of examination were demonstrated. Tentative plans have been drawn up for a remodelling of this department, with the purchase of modern equipment when funds become available.

Dr. Garrett Sullivan reports 930 field examinations were done in the Perimetry Room. The need for more modern equipment has been evident for some time and now several new pieces of apparatus have been ordered.

The Orthoptic Clinic, now called occular motility to avoid confusion with the Orthopedic Clinic, continues to gain. Miss Ann Stromberg reports 6,351 patient visits last year, of which 711 were from private patients referred from the members of the staff.

In the Eye Pathology Department, a total of 396 specimens were examined, 220 biopsies and 175 whole eyes. Financial support for this laboratory has always been a problem. The reason for this is that examination of an enucleated eye is similar to an autopsy which benefits only the doctor — not the patient. Consequently no fee is charged and thus, the laboratory never pays for itself. It would be a great step forward for ophthalmology and the public welfare, if this laboratory could be endowed.

Before Dr. Heath's retirement on June 30, 1954, he continued to conduct his clinical pathological conferences once a month. One member of the staff was given the clinical history of an interesting case, which he presented and discussed, venturing a diagnosis. Dr. Heath then gave the pathologic findings, illustrated by slides. The teaching value of such a system, following the pattern of the famous Cabot Case Series, is very great. The full presentation and discussion of these cases have been published in the American Journal of Ophthalmology.

The residents, in addition to their rotation in this laboratory, have prepared reviews and analysis of various conditions. Dr. Robert Herm has written on retinoblastoma, and Dr. Frank Milam on lacrimal gland tumors. The Laboratory has recently begun to share in the use of the Mosher Laboratory's autotechnician. It is hoped this will facilitate a more rapid report of biopsy material which the clinician needs for final diagnosis. Dr. Cogan, the new director, is having all current specimens catalogued in a system of cross index. Later this will be applied to all previous laboratory material so that specimens of an entity may be easily gathered and reviewed.

INCREASING INTEREST FOR EYE BANK

The Eye Bank has attracted increasing public interest, as evidenced by the growing number of donor inquiries. Responsible for much of this is the devoted work of our executive secretary, Mrs. William A. Slade, Jr., whose numerous talks to various groups have been most effective.

The film, "Eyes of Service," made possible by the generosity of the Junior League of Boston, has been shown 50 times to all sorts of clubs and organizations. In addition to the film, we have had two television programs and three radio broadcasts, as well as numerous newspaper stories. As a result of this publicity, our affiliated hospital list now stands at 60, an increase of five since the last report. During this period, 78 eyes were received, of which 20 were used for corneal transplant surgery and the remaining 58 for research.

The primary purpose of the Eye Bank is, of course, to supply eye tissue for corneal transplant surgery. Some of the eyes delivered are not suitable for this delicate operation but they are not wasted. A generous benefactress of the Eye Bank, Mrs. Thomas Cummins, has donated $1,000 for a research project. This same donor was responsible for funds which were used to train a young doctor from India, Dr. Rameshar Lal Pahwa, in the corneal transplant technique. Another donation of $2,000 for general expenses was received from the Travelli Fund. The Eye Bank is greatly indebted also to the Red Cross, the airlines, and the railroads for their invaluable assistance in calling for and delivering eye tissue. Without their cooperation, the program could not be carried on.

EXPANDING RETINA SERVICE

The new enlarged quarters of the Retina Service have made it possible to train more young ophthalmologists in the technique of examining and operating on detached retinas. Aside from the senior resident, who spends three months on this service, Dr. Silvio Von Pirquet of Vienna holds a one year fellowship, supported by the Retina Foundation. Four other visiting ophthalmologists also stayed for three months or more, in order to get the necessary training in stereoscopic indirect ophthalmoscopy. In addition to Dr. Charles Schepens, who heads this service, Dr. Ichiro Okamura and Dr. Robert Brockhurst are on the permanent staff. Each is engaged in clinical research on the detached retina problem. In the meantime, the patient load continues to increase as more patients with detachment are referred to the Infirmary from outside Boston. During the past year, a total of 720 patients were completely worked up, of whom 468 were operated upon.

TRAINING YOUNG OPHTHALMOLOGISTS

The second function of the Infirmary, the training of young doctors to become ophthalmologists, is carried out over a period of 33 months. The first five months is spent in the Harvard Basic Science Course and the next 28 in residency. During this period, the resident receives continuous instruction by staff members, and increasing responsibilities.

A very valuable asset of this residency is our close association with the various services of the Massachusetts General Hospital. For instance, for three months the young man is assigned to the Neurological Service and follows all neurosurgical cases, makes neurological rounds and performs perimetric examinations. Because of the close association between neurology and ophthalmology, this is invaluable experience. He also answers all consultations on the MGH wards and thus, has the advantage of seeing the integration of ophthalmology with general medicine, a fact he might lose sight of unless sufficiently emphasized.

The resident staff consists of nine men who enter at stated periods throughout the year (one every three months) and progress upward through various grades of responsibility. So far we have been fortunate in obtaining men of high caliber who do well in their Board examinations and are a credit to the institution after graduation.

THE GROWTH OF RESEARCH

The third function of the Infirmary, that of furthering research, has grown by leaps and bounds since World War II. The Howe Laboratory of Ophthalmology, so long and intimately associated with us, continues its productive activity. Dr. Cogan, the Director, is investigating fat formation in the cornea and other tissues of the body, working with Dr. Kuwabara. It is one of those unpredictable turns of research that these studies on the eye appear to bear as much on the general problem of arteriosclerosis as they do on strictly ophthalmic problems.

Dr. Morton Grant is continuing his studies in toxicology and pharmacology as related to the eye and, in collaboration with Drs. Robert Trotter and Paul A. Chandler, has made significant contributions in our knowledge of the outflow of aqueous from the anterior chamber. The technique called tonography, which Dr. Grant developed for measuring outflow, has now been widely adopted throughout the world.

Dr. Jin Kinoshita has further probed the frontiers of ophthalmic biochemistry and made highly significant and original observations on the metabolism of the lens and cornea. Through his studies, it appears clear that there are major differences in the energetics of these avascular and transparent structures from those of tissues elsewhere in the body.

Dr. David Donaldson has perfected a stereoscopic camera for photographing the angle of the anterior chamber. His work of correlating the findings with the clinical status of the eye has been an important advance in our understanding of glaucoma and other conditions. His exhibit at the American Academy of Ophthalmology and Otolaryngology received the Blue Ribbon Award.

The Retina Foundation is also doing important basic research. Dr. Endre Balazs is studying the chemical structure and formation of the vitreous body. With Dr. Claes-Henrik Dohlmann, he has performed chemical investigations of Descemet's membrane and of the corneal stroma. In the field of tissue culture, he is studying the effect in vitro, of mucopolysaccharides on the mitosis and migration of fibroblasts. He is also investigating, in collaboration with Dr. Gordon Brownell, the biosynthesis of hyaluronic acid with the help of radioactive isotopes.

Dr. Arthur Howe is studying the effect of electromagnetic radiation on the vitreous body and Dr. Lazlo Varga is investigating the physiochemical properties of the vitreous gel. Dr. Marie Jakus is continuing her work on the fine structure of eye tissue with the electron microscope. Dr. John Gergely, with Mr. and Mrs. T. Laurent, has made light scattering studies on hyaluronic acid.

Retrolental fibroplasia, first recognized at the Infirmary by the late Dr. Theodore Terry in 1940, is still under investigation. Dr. Merrill King, Dr. Leona Zacharias, and Dr. Julian Chisholm, Jr., have been studying its epidemiology, in collaboration with the Boston Lying-In Hospital and with Dr. William E. Reynolds of the Department of Preventive Medicine, Harvard Medical School. It appears there may be other factors besides excessive oxygen in the etiology of this disease, which blinds so many premature infants. The Foundation for Vision has continued its generous support of this project.

Dr. William Stone, Jr. is continuing his interesting work on the plastic cornea, made possible by grants from the Navy and Air Force. This work is still in the animal experimental stage but gives promise of success in the future. He is also studying the feasibility of using certain plastics as substitutes for vitreous.

The sterilization and preservation of ophthalmic solutions has been the subject of a combined study by the Bacteriology Laboratory and the Pharmacy. Mr. John Murphy investigated the conditions under which ophthalmic drugs will withstand degradation after autoclaving when they are kept for a year or more.

Dr. Henry Allen and Miss Anita Mangiaracine, our Bacteriologist, made a comparative study of the anti-bacterial properties of several substances used as preservatives for eye solutions. In a series of well controlled experiments, they found that chlorobutanol 0.5% introduced at the Infirmary by Mr. Murphy 25 years ago was still the best. Finally, a survey of all bottles of medications currently in use at the Infirmary was undertaken. Of the 576 bottles tested, only one showed bacterial contamination.

Dr. Edwin B. Dunphy is continuing his studies on the uptake of radioactive phosphorous by occular tumors. In this work he has had invaluable assistance from Dr. Knud Dreisler and Dr. Alfred Scott, as well as from Dr. William Sweet of the MGH Staff.

Edwin B. Dunphy, M.D.,
Chief of Ophthalmology

Department of Otolaryngology

In previous years I have spoken of the problems confronting hospitals in obtaining residents to properly man their institutions. This shortage, as I have explained, is not only due to changed economic conditions but to the demands of the military services and their short-sighted policies in refusing to defer young men for special training.

It has become quite apparent that procurement for the military services is only interested in obtaining quantity with little or no regard for the quality and type of doctor obtained. Early last year a conference was arranged with those in charge of the procurement services, and it became quite evident from this meeting that no consideration would be given to adequate, specialized training for young physicians who would later enter the military service.

Economic conditions, aggravated by early marriage and growing families, are forcing many of our young physicians into general practice, thereby decreasing the number of young men entering the specialties. This factor has affected all specialty training.

The Massachusetts Eye and Ear Infirmary has been fortunate in attracting desirable young men for its resident staff. As previously reported, we are in competition with state universities, endowed institutions, and others who pay residents three or four times the amount of salary given at the Infirmary. In years past, we have attempted to make up this deficiency in monetary reward by the quality of our training. This, I believe, we have succeeded in doing.

TEACHING PROGRAM

The three-year training program as recommended by the Council on Medical Education of the American Medical Association, the American College of Surgeons, and by the American Board of Otolaryngology has been in effect approximately three years. We are happy to report that, at the meeting of the Residency Review Committee on December 11 in Chicago, the Infirmary was re-approved for training in otolaryngology.

As President of the American Board of Otolaryngology at the time the Residency Review Committee was established, it was my duty to appoint three representatives to this committee, only to find that I, myself, had been appointed as a representative by the American College of Surgeons. The only criticism of our hospital was the incomplete records of our private patients. Steps have already been taken by the Administration to correct this deficiency.

I have previously spoken of my desire to increase our resident staff from 9 to 12, in order to include the basic sciences as part of the training, and to enable us to rotate our residents through the Department of Otolaryngology at the Children's Hospital. This recommendation has been discussed by the Board of Managers where it was favorably received, and we hope to put the plan into effect on July 1, 1955.

Our educational program has been very active. On Monday afternoon, residents meet with the chief resident to discuss an assigned subject. Senior residents meet at the Harvard Medical School on Monday evenings. The clinical-pathological conference on Wednesday mornings is always well attended, and the Thursday night sessions are still active. Dr. Philip Mysel continues to give his lecture to the residents every Wednesday afternoon.

RESEARCH AND LABORATORIES

During the past year, Dr. Moses H. Lurie was appointed to the Consulting Staff and made Director of Otological Research. During the year he has continued his work on studying the effects of antibiotics on the organ of hearing.

Dr. Werner Mueller continues as Director of Mosher Laboratory. His work has been of high order and has greatly increased in amount. The great increase in the major surgical procedures has thrown a heavy burden on the laboratory staff. The addition of a technicon, which automatically processes tissue that is usually done manually, permits studies to be made on tissue within 24 hours of removal.

Modern medicine is dependent upon the accurate bacteriological identification of infecting organisms. Only by proper identification and by testing of the sensitivity of these organisms to an antibiotic can the proper antibiotic for that organism be prescribed. As has been previously stated, the Infirmary is fortunate in having Miss Anita Mangiaracine in charge of our Bacteriological Laboratory. Her work continues to be of the highest order and has been of invaluable aid to our doctors and to our patients. The work of this laboratory was of great interest to the late Mr. Henry K. Porter while he served on the Board of Managers, and it was only proper that the Board this year name the laboratory, "The Porter Memorial Laboratory."

Dr. H.J. Sternstein continues his studies on atrophic rhinitis. In his clinical studies he finds that the combined use of antibiotic insufflation and vasodilator therapy has shown striking improvements in 64% of patients afflicted with this malady.

Studies have been in progress with Drs. Ruth and John Graham of the Cytologic and Gynecological Departments of MGH, and Drs. Maloof and J. Lerman of the Metabolic Clinic.

Preliminary results from the cytologic data of nasal smears thus far indicate a rise of 50% or more in the columnar cell index of treated as against untreated cases. An effort was made to correlate atrophic changes in the nasal and vaginal mucosa from cytological smears of nasal and vaginal secretions. No correlation of a clearcut tie-in between atrophic vaginitis and atrophic rhinitis was evident. However, the data has uncovered certain discrepancies between the clinical vaginal findings and the cytological studies which will require further investigation with serial vaginal biopsy studies.

Metabolic studies have only been partially initiated. Thus far it has been of significance that blood cholesterols in four patients have been reported as uniformly high. Further plans for continued research are in progress.

Studies on the common cold and other viruses affecting the upper respiratory tract are being conducted by the Virus Research Laboratory. By employing tissue culture techniques, Dr. Robert S. Gohd is developing practical methods that will facilitate the research on these viruses.

Recent reports on the finding of an "adenoid-pharyngel-conjunctival virus" supplements the work on chick embryo implants of adenoid tissue.

In conjunction with the allergy Clinic, Dr. Francis L. Weille continues his fine work on the vascular structures of the cochlea. For the first time in any laboratory he has been able to photograph in moving pictures the change in the fine blood vessels of the "stria vascularis" of the cochlea and to observe the changes of these vessels, changes caused by the administration of certain drugs.

Dr. George Kelemen, with the able assistance of Miss Dorothy Linden as technician, has been studying the congenital defects in the organ of hearing, in diabetes, in hydrocephalus, in RH incompatibility, and in those due to anoxia. In association with Dr. Philip E. Meltzer, the effects of X-Ray radiation on the lymphoid tissue around the opening of the eustachian tube was histologically analyzed.

STAFF ACTIVITIES

The work of many of the Infirmary staff members is always eagerly sought for presentation before scientific societies. In May, the American Board of Otolaryngology met in Boston and held its Clinical Examination at the Infirmary. The National Ear, Nose and Throat Societies also met in Boston, and members of our staff held conspicuous places on their programs and in their discussions. A list of publications may be found at the back of this Annual Report.

We regret to say that our staff has lost three former members during the past year: Dr. Josiah E. Quincy, Assistant Surgeon in Otolaryngology — Graduate in Otolaryngology, 1926; Dr. Harry A. Barnes, Consulting Surgeon in Otolaryngology; and Dr. Harris P. Mosher, Consulting Surgeon in Otolarnygology, former chief of Otolaryngology, 1922-1939. Dr. Mosher was, at the time of his death, a member of the Corporation. As dean of American otolaryngology, he was renowned throughout the world for his teachings and contributions to Otology and Laryngology.

LeRoy A. Schall,
Chief of Otolaryngology

* * *

*Articles Published**

DEPARTMENT OF OPHTHALMOLOGY

ALLEN, H. F. and MANGIARACINE, A. B. Sterilization of Sharp Instruments for Use in Eye Surgery, A.M.A. Arch. Ophth. 5:311-314, March, 1954.

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CHISHOLM, J. F., JR.; KING, M. J.; REYNOLDS, W. E.; and ZACHARIAS, L. The Incidence and Severity of Retrolental Fibroplasia in Relation to Possible Causative Factors. (See ZACHARIAS.)

COGAN, D. G.; BROCKHURST, R. J.; and HYNES, E. A. Crystalline Dystrophy of the Cornea. (See BROCKHURST.)

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SCHEPENS, C. L. Pathologic Changes in Vitreous Body, Am. J. Ophth. 38:8-21 (pt. II), July, 1954.

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DROOKER, J. C. Wartime Experience with Skull Injury and Blast and Their Effect Upon the Ear, A.M.A. Arch Otolaryng. 58:546-574, Nov., 1953.

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LURIE, M. H., and HAWKINS, J. E., Jr. The Ototoxicity of Dehydrostreptomycin and Neomycin in the Cat, Ann. Otol., Rhin., and Laryng. 62:1138-1148, Dec., 1953.

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MARTINEZ, D.; WEILLE, F. L.; GARGANO, S. R.; IRWIN, J. W.; GILCHRIST, M., and GORDON, P. An Experimental Study of the Small Blood Vessels of the Spiral Ligament and Stria Vascularis of Living Guinea Pigs During Anaphylaxis. (See WEILLE.)

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RICHARDS, L. G. A Half Century of Trilogical Transactions, Laryngoscope 64:595-625, July, 1954.

ROOPENIAN, A. and KAZANJIAN, V. H. A Clinical Experience in the Treatment of Hemangeomata, Plastic and Reconstructive Surg. (See KAZANJIAN.)

SCHALL, L. A. Symposium: Carcinoma of the Larynx—Evaluation of Total Laryngectomy, Tr. Am. Acad. Ophth. 58: 26-29, Jan.-Feb., 1954.

WEILLE, F. L.; GARGANO, S. R.; IRWIN, J. W.; MARTINEZ, D., and PFISTER, R. Circulation of the Spiral Ligament and Stria Vascularis of Living Guinea Pig — Experimental Study, A.M.A. Arch. Otolaryng. 59:731-738, June, 1954; Tr. Am. Acad. Ophth. 58:466-472, May-June, 1954.

WEILLE, F. L. and GARGANO, S. R. Facts and Fallacies of Bone Conduction, Tr. Am. Laryng., Rhino., and Oto. Soc. 57th Meeting, pp. 1-30, 1953.

WEILLE, F. L.; MARTINEZ, D.; GARGANO, S. R.; IRWIN, J. W.; GILCHRIST, M., and GORDON, P. An experimental study of the Small Blood Vessels of the Spiral Ligament and Stria Vascularis of Living Guinea Pigs during Anaphylaxis, Laryngoscope 64:656-666, Aug., 1954.

ZONDERMAN, B. Modern Concepts in the Treatment of Ototis Media, New Eng. J. Med. 249:643-645, Oct. 15, 1954.

HOWE LABORATORY OF OPHTHALMOLOGY

COGAN, D. G. and ADAMS, R. D. A Type of Paralysis of Conjugate Gaze (Ocular Motor Apraxia), A.M.A. Arch. Ophth. 50:434-442, Oct., 1953.

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COGAN, D. G. and VISTOR, M. Ocular Signs of Wernicke's Diseases, A.M.A. Arch. Ophth. 51:204-211, Feb., 1954.

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DONALDSON, D.; COGAN, D. G.; GOFF, J. L.; and GRAVES, E. Experimental Radiation Cataract, III. Further Experimental Studies on X-Ray and Neutron Irradiation of the Lens. (See COGAN.)

GRANT, W. M. and TROTTER, R. R. Diamox (acetazoleamide) in Treatment of Glaucoma, A.M.A. Arch. Ophth. 51:735-739, June, 1954.

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KUWABARA, T. and COGAN, D. G. Metastatic Carcinoma to Eye from Breast; Effect of Endocrine Therapy. (See COGAN.)

TROTTER, R. R. and GRANT, W. M. Diamox (acetazoleamide) in Treatment of Glaucoma. (See GRANT.)

Directory

MEMBERS OF INFIRMARY STAFF, ALUMNI AND RESIDENTS

Names of members of the Infirmary Staff are printed in capital letters.

Abbreviations following the name indicate to what service of the Infirmary the individual belongs:

Oph.; Ophthalmology
Otolar.; Otolaryngology
Bron.; Bronchoscopy
Esoph.; Esophagoscopy

Letters in small type preceding the abbreviations indicate the special work of the individual:

a.; assistant
an.; anesthetist
assoc.; associate
c.; chief of service
cons.; consulting
dir.; director
exec. a.; executive assistant
fel. res.; fellow in research
grad.; graduate
path.; pathologist
r.; resident
roent.; roentgenologist
s.; surgeon
s.p.o.; surgeon for plastic operations
s.t.c.; surgeon assigned to Tumor Clinic

As of January, 1955

Adams, Samuel T., Oph. 1951
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727 W. 7th, Los Angeles, Cal.

Alexander, Seeyman L., Aural 1919
170 St. George, Toronto, Ont., Canada

ALLEN, HENRY F., (a. Oph.), Oph. 1949
200 Beacon, Boston, Mass.

Allen, John H., Aural 1904
32 Deering, Portland, Me.

ALLMAN, CHARLES H., (s. Otolar.), Otolar. 1930
520 Commonwealth Ave., Boston, Mass.

ALPERT, D. ROBERT, (a. Oph.)
41 Bay State Rd., Boston, Mass.

Angelini, Hugo D., Otolar. 1951
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Anthony, Alan R., Oph. 1936
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Anthony, Marc, Oph. 1929
508 Old Nat'l Bank Bldg., Spokane, Wash.

Ayash, John J., Otolar. 1946
McConnell Clinic, 21 W. Central Ave., Minot, N. D.

Bahn, Gustave C., Oph. 1948
1024-28 Maison Blanche Bldg., New Orleans, La.

Blair, Hugo L., Oph. 1932
118 Plummer Cir., Rochester, Minn.

Ballenger, John J., Otolar. 1943
806 Park Ave., Wilmette, Ill.

Barton, Richard T., Otolar. 1945
9754 Wilshire Blvd., Beverly Hills, Cal.

Bassen, Edward J., Oph. 1928
70 E. 66th, N. Y. C.

Bauer, Frederick, Aural 1902

Beck, Peter, Oph. 1954
142 Court, Portsmouth, N. H.

BEECHER, HENRY, (c. an. MGH)
Fruit, Boston, Mass.

BEETHAM, WILLIAM P., (s. Oph.), Oph. 1929
108 Bay State Rd., Boston, Mass.

BENEDICT, EDWARD B., (a. Bron. & Esoph. MGH)
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Birdsall, Clarence H., Aural 1916, Oph. 1918
26 Summer, Haverhill, Mass.

Black, Daniel E., Otolar. 1944
184 Main, Nashua, N. H.

Bobbett, Gordon H., Otolar. 1948
125 W. Cheves, Florence, S. C.

BOGAN, FREDERICK L., (cons. s. Otolar.), Aural 1908
249 River, Milton, Mass.

Boies, Lawrence R., Otolar. 1931
1937 Medical Arts Bldg., Minneapolis, Minn.

BRACONIER, HARRY E., (a. s. Oph.), Oph. 1945
1180 Beacon, Boston, Mass.

Brady, Frank W., Otolar. 1942
8 Merrimac, Lowell, Mass.

Brawner, Leon E., Otolar. 1925

BREED, FREDERIC B . (a. Oph.), Oph. 1950
2 Winter, Salem, Mass.

Brewer, David W., Otolar. 1948
1100 E. Genessee, Syracuse, N. Y.

BROCKHURST, ROBERT (a. Oph.), Oph. 1951
62 Basset, Lynn, Mass.

BROWN, JESSE F., (c. an.)
243 Charles, Boston, Mass.

Brown, Lester A., Jr., Otolar. 1937
478 Peachtree, Atlanta, Ga.

Bryan, Burton D., Otolar. 1943
151 Rock, Fall River, Mass.

BULLINGTON, S. JAMES, (r. Oph.)

Burke, J. Robert, Oph. 1918, Aural 1919, Retired
238 Fifth Avenue, N. E., St. Petersburg, Fla.

Cameron, Walter C., Oph. 1930
1103 Medical Arts Bldg., Tacoma, Wash.

Candray, Carlos H., Oph. 1944
San Salvador, El Salvador, C. A.

Caron, Armand L., Otolar. 1927
Medical Arts Bldg., Worcester, Mass.

Carroll, Frank D., Oph. 1935
635 W. 165th St., N. Y. C.

CARROLL, WALTER J. E., (assoc. s. Otolar.)
5 Chestnut, Arlington, Mass.

Carter, Leland E., Oph. 1926
613-617 David Whitney Blvd., Detroit, Mich.

Case, Paul H., Oph. 1938
418 Professional Bldg., Phoenix, Ariz.

CASTEN, VIRGIL G., (s. Oph.), Oph. 1931
412 Beacon, Boston, Mass.

CAVANAUGH, THOMAS, (a. s. Oph.), Oph. 1940
395 Commonwealth Ave., Boston, Mass.

Cave, Linus S., Otolar. 1927
1504 State Tower Bldg., Syracuse, N. Y.

CERRATO, CALVIN M., (a. s. Otolar.), Otolar. 1944
15 Bay State Rd., Boston, Mass.

Chamberlain, Calvin B., Oph. 1944
342 Investment Bldg., Pomona, Cal.

CHANDLER, PAUL A., (s. Oph.), Oph. 1925
5 Bay State Rd., Boston, Mass.

CHAPMAN, RICHARD B., (r. Oph.)

CHISHOLM, JULIAN F., JR., (a. Oph.)
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Clarke, Samuel T., Oph. 1939
505 Medico-Dental Bldg., Reno, Nev.

CLOUGH, JOSEPH M., (a. s. Oph.), Otolar. 1939, Oph. 1941
101 Bay State Rd., Boston, Mass.

COGAN, DAVID G., (s. Oph., dir. path. lab.), Oph. 1935
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Cogan, James R., Oph. 1944
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1516 Cook, Denver, Colo.

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Coyle, John A., Oph. 1931
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Evans, William H., Oph. 1924
510 Dollar Bank Bldg., Youngstown, Ohio

Farrell, James I., Oph. 1932
308 Kempf Bldg., Utica, N. Y.

FINK, ROBERT J., (r. Oph.)

Filmer, George A., Oph. 1939
520 Metropolitan Bldg., Denver, Colo.

Fisher, Stanwood E., Aural 1909
338 Spring, Portland, Me.

Floyd, Paul E., Oph. 1946
2 Middle, Farmington, Me.

Foote, Charles M., Oph. 1940
412 No. Hastings Ave., Hastings, Neb.

Frackleton, Ralph J., Otolar. 1933
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346 State, Albany, N. Y.

Gaudreau, Honore E., Oph. 1930
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Gifford, Harold, Jr., Oph. 1934
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Gilbert, John J., Oph. 1917, Aural 1920
209 Angell, Providence, R. I.

Giller, Herbert, Oph. 1952, Military Service
1110 Seminole Highway, Madison, Wis.

Gillespie, Elmer H., Otolar. 1932

Ginsberg, Joseph, Oph. 1953, Military Service
881 Lexington Ave., Cincinnati, Ohio

Goduti, Richard J., Oph. 1946
704 Congress, Portland, Me.

GOHD, ROBERT S., (res. vir.)
243 Charles, Boston, Mass.

Goldcamp, Richard R., Otolar. 1948
364 Fairgreen Ave., Youngstown, Ohio

Goldman, A. Milton, Oph. 1924
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GOODALE, JOSEPH L., (cons. s. Otolar.)
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GOODALE, ROBERT L., (s. Otolar.), Otolar. 1926
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GOODALL, EDWIN B., (a. Oph.), Oph. 1952
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Heffernan, David A., Oph. 1904
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Hill, Frederick T., Aural 1916
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HIRSCH, LAWRENCE S., (a. Otolar.)
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Hobart, Carl, Oph. 1922
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Hollabaugh, Charles F., Oph. 1932
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Holt, Lawrence B., Oph. 1948
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IRGENS, EDWIN R., Otolar. 1938
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IRVINE, A. RAY, JR., Oph. 1947
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JEWETT, EVERETT P., Oph. 1945
21 West, Worcester, Mass.

JOHNSON, CARL C., (a. s. Oph.), Oph. 1942
5 Bay State Rd., Boston, Mass.

JOHNSON, CHARLES I., (s. Otolar.), Otolar. 1929
403 Commonwealth Ave., Boston, Mass.

JOHNSON, DAVID S., (r. Oph.)

JOHNSON, LORAND V., Oph. 1937
2065 Adelbert Rd., Cleveland, Ohio

JUDD, DELBERT K., Otolar. 1934
423 Arcade Bldg., Kankakee, Ill.

KANT, ALFRED, Oph. 1948
620 Woolworth Bldg., Watertown, N. Y.

KAZANJIAN, KENNETH A., (a. s. Otolar.)
475 Commonwealth Ave., Boston, Mass.

KAZANJIAN, VARAZTAD H., (cons. s. p. o.)
475 Commonwealth Ave., Boston, Mass.

KEARNEY, RICHARD A., Aural & Lar., 1921

KELEMEN, GEORGE, (res. assoc.)
20 Gloucester, Boston, Mass.

KELLEY, VINCENT J., (s. Otolar.)
520 Commonwealth Ave., Boston, Mass.

KENNEALLEY, ELMER V., Oph. 1952
479 Main Street, Greenfield, Mass.

KENNEDY, MICHAEL F., Oph. 1927
805 Columbia Medical Bldg., Washington, D. C.

KENT, CHARLES, (a. s. Otolar.)
270 Commonwealth Ave., Boston

KERST, J. ARTHUR
1211 S. 6th, Springfield, Ill.

KING, DAVID G., Otolar. 1951
605 Commonwealth Ave., Boston, Mass.

KING, MERRILL J., (cons. s. Oph.), Oph. 1932
Medical Arts Bldg., 22 White, Rockland, Me.

KING, MERRILL J., JR., (r. Oph.)

KLOTZ, ROBERT E., (r. Otolar.)

KOS, CLAIR M., Otolar. 1941
University Hospital, Iowa City, Iowa

LANE, CHARLES S., Otolar. 1949
Merchants' National Bank Bldg., Fort Smith, Ark.

LANGWORTHY, HENRY G., Aural 1907
394 W. 10th, Dubuque, Iowa

LAPIERRE, WARREN W., Oph. 1948
32 Clinton Ave., Norwichtown, Conn.

LAVOIE, ROLAND, JR., Otolar. 1950
3 Claire Fontaine, Quebec City, Que., Canada

LAWLOR, EDWARD F., (a. s. Otolar.), Otolar. 1941
67 Vernon, Waltham, Mass.

LEAHEY, BRENDAN D., (s. Oph.), Oph. 1933
9 Central, Lowell, Mass.

LEAVELLE, ROBERT B., Oph. 1953
4747 Vineland Ave., Suite E., N. Hollywood, Cal.

LECONTE, CHARLES M., Otolar. 1947
Rue Royale, Cap-Haitien, Haiti

LEMOINE, ALBERT N., Oph. 1923
411 Alameda Rd., Kansas City, Mo.

LENTINE, JOSEPH, (assoc. s. Otolar.), Otolar. 1935
15 Bay State Rd., Boston, Mass.

LEVITT, JESSE M., Oph. 1933
515 Ocean Ave., Brooklyn, N. Y.

LEWIS, DONALD K., (a. s. Otolar.), Otolar. 1943
15 Dix, Winchester, Mass.

LIEBMAN, SUMNER D., (a. s. Oph.), Oph. 1943
115 Bay State Rd., Boston, Mass.

Lilly, John S., Otolar. 1951
21 So. Franklin, Richwood, Ohio

Lincoff, William, Oph. 1954
302 E. 9th, Chester, Pa.

Lineback, Merrill I., Otolar. 1952
28 Eighth, N. E., Atlanta, Ga.

Lodge, Edmund A., Otolar. 1924
Pleasant, Gloucester, Mass.

LO-PRESTI, JOSEPH J., (a. Oph.)
34½ Beacon, Boston, Mass.

Loring, Robert G., Oph. 1900, Retired

Lothrop, Oliver A., Aural 1911
101 Beacon, Boston, Mass.

Lougee, John L., Aural 1909
475 Commonwealth Ave., Boston, Mass.

Lovely, David K., Otolar. 1946
73 Deering, Portland, Me.

LOVESEY, BURTON E., (assoc. s. Otolar.), Otolar. 1935
116 Rockland, Natick, Mass.

LURIE, MOSES H., (cons. s. Otolar., dir. Otolar. Res.)
483 Beacon, Boston, Mass.

Lynch, Mercer G., Otolar. 1936
1567 Exposition Blvd., New Orleans, La.

MacDonald, Alexander E., Oph. 1923
421 Medical Arts Bldg., Toronto, Ont., Canada

MacDonald, Donald H., Otolar. 1930

Machamer, R. Wenner, Otolar. 1945
1027 Rose Bldg., Cleveland, Ohio

MacKenzie, Roland C., Oph. 1911
30 Grant, Waltham, Mass.

MacLAUGHLIN, CHARLES H., (a. s. Oph.), Oph. 1947
834 Broadway, Everett, Mass.

MACMILLAN, ALEXANDER S., (roent.)
483 Beacon, Boston, Mass.

MacMillan, Andrew L., Jr., Aural 1912
46 Pleasant, Concord, N. H.

Macnie, John P., Oph. 1929
635 W. 165th, N. Y. C.

MALKOFF, JACK, (r. Otolar.)

MANCALL, IRWIN T., (a. Oph.), Oph. 1952
750 Main, Hartford, Conn.

MANGIARACINE, ANITA, (bact.)
243 Charles, Boston, Mass.

Mansur, Leon Wallace, Oph. 1898, Retired
Valley Center, Cal.

MARTIN, S. FORREST, (a. s. Oph.), Oph. 1938
165 Bay State Rd., Boston, Mass.

Martinez, Daniel E. M., Otolar. 1953
Scott & White Clinic, Temple, Tex.

Mattis, Robert Dean, Oph. 1942, Retired
4474 Westminster Pl., St. Louis, Mo.

McCabe, Frank J., Oph. 1916
204 Angell, Providence, R. I.

McCall, Robert E., Otolar. 1938
236 So. Main, Marion, N. C.

McClintock, Walter L., Otolar. 1938

McGuigan, G. Edmund, Oph. 1924
116 W. Market, York, Pa.

McIntire, Frederic J., Oph. 1910
63 N. Common, Lynn, Mass.

McINTIRE, FREDERIC J., JR., (a. Otolar.)
63 N. Common, Lynn, Mass.

McKEIGUE, JOHN E., (a. s. Otolar.), Otolar. 1949
520 Commonwealth Ave., Boston, Mass.

McKenzie, Rodney J., Otolar. 1942
480 Doctors' Bldg., 19 Garfield Pl., Cincinnati, Ohio

McLeod, Angus M. Otolar. 1942.
Medical Arts Bldg., Toronto, Ont., Canada

McLeod, John, Oph. 1930
636 Argyle Bldg., Kansas City, Mo.

Meek, Raymond E., Oph. 1926
729 Park Ave., N. Y. C.

MELTZER, PHILIP E., (s. Otolar.), Aural 1919
Winthrop Foundation
285 Commonwealth Ave., Boston, Mass.

Merritt, Robert E., Oph. 1920, Retired
Valley Center, Cal.

Mertins, Paul S., Otolar. 1936
32 Clayton, Montgomery, Ala.

Messenger, Harry K., Oph. 1934
140 Marlborough, Boston, Mass.

Meyer, Monto F., Oph. 1919
904 Canal Bank Bldg., New Orleans, La.

MILAM, DANIEL F., (r. Oph.)

Miles, Nathan E., Oph. 1937
1031 S. 21st, Birmingham, Ala.

MILLER, DANIEL, (a. s. Otolar.), Otolar 1943
403 Commonwealth Ave., Boston, Mass.

Mills, Lloyd, Jr., Oph. 1947

MONTGOMERY, WILLIAM, (r. Otolar.)

Moore, Donald E., Oph. 1937
417 Medical Arts Bldg., Syracuse, N. Y.

Moore, Edward E., Oph. 1944
Box 476, Marion, Ala.

Moore, James A., Otolar. 1940
525 E. 68th, N. Y. C.

Moorman, John D., Oph. 1939
Times Bldg., Huntsville, Ala.

MORRISSEY, ARTHUR M., (a. Oph.)
24 Rural Ave., Medford, Mass.

MOSHER, HENRY A., (a. s. Oph.), Oph. 1941
71 Bay State Rd., Boston, Mass.

Moteley, Frederick E., Otolar. 1925
Charlotte Eye & Ear Hospital, Charlotte, N. C.

Moulton, Everett C., Jr., Oph. 1948
Merchants Nat'l Bank Bldg., Fort Smith, Ark.

MUELLER, WERNER, (dir. Mosher Lab.), Otolar. 1933
243 Charles, Boston, Mass.

Murphy, William E., Otolar. 1933
Slater Bldg., Worcester, Mass.

Myers, Roscoe W., Oph. 1927
36 Pleasant, Worcester, Mass.

Myers, Stanley A., Otolar. 1937
2218 Market, Youngstown, Ohio

MYSEL, PHILIP, (cons. s. Otolar.)
483 Beacon, Boston, Mass.

Nachlas, N. Edward, Otolar. 1951
Latrobe Bldg., Charles & Read, Baltimore, Md.

Navas, Luis, Otolar. 1950
Apartado N. 376, Managua, Nicaragua, C. A.

Nicholson, Harry M., Aural 1913
515 Medical Arts Bldg., Hamilton, Ont., Canada

O'Connell, John D., Oph. 1943
50 Farmington Ave., Hartford, Conn.

O'Connor, Michael John, Aural & Lar. 1923
105 Waterman, Providence, R. I.

OFFENBACH, BERTHA, (a. Oph.)
270 Commonwealth Ave., Boston, Mass.

Ogden, Frederic W., Otolar. 1942
Fayetteville, Ark.

OKAMURA, ICHIRO, (a. Oph.), Oph. 1952
243 Charles, Boston, Mass.

Olds, Bomar A., Otolar. 1929
124 W. Princeton Ave., College Park, Ga.

OLSEN, HENRIETTA I., R.N., (exec. a.)
M.E. & E.I.

Parker, Harry C., Oph. 1902

PATTERSON, WILLIAM, (r. Otolar.)

PAVLO, IRVING, (a. Oph.)
520 Beacon, Boston, Mass.

PERRETEN, FRANK A., (r. Oph.)

PERONE, PIERO, (r. Otolar.)

PETERSON, WALBORG, R.N., (exec. a.)
M.E. & E.I.

Pfister, Raymond L., Otolar. 1952
1298 Herschel Ave., Cincinnati, Ohio

PIPPITT, RICHARD B., (a. Oph.), Oph. 1949
328 Washington, Wellesley Hills, Mass.

PIRQUET, SILVIO, (fel. in Oph.)
243 Charles, Boston, Mass.

POIRIER, GEORGE H., (cons. s. Otolar.)
60 Bay State Rd., Boston, Mass.

POLLEN, ABRAHAM, (a. s. Oph.), Oph. 1944
636 Beacon, Boston, Mass.

POLLOCK, FREDERIC J., Otolar. 1935

POPPEN, MAYO J., Oph. 1948
635½ Van Nuys Blvd., Van Nuys, Cal.

POSNER, MARVIN, Oph. 1952
371 State, Albany, N. Y.

PRICE, R. RAYMOND, Oph. 1936
118 Rutledge Ave., Charlestown, S. C.

PROVOST, ADOLPHE J., Otolar. 1927
1458 Elm, Manchester, N. H.

PRUDHON, CHARLES A., Otolar. 1927
168 Sterling, Watertown, N. Y.

QUEBEDO, A. ARTURO, Oph. 1933
4a Ave., Sur 19, Guatemala City, Guatemala, C. A.

QUEVEDO, JULIO, Otolar. 1941
15 Calle 6 - 59, Guatemala City, Guatemala, C. A.

RAGAN, JOHN D., Oph. 1954
220 Vancouver Block
736 Granville, Vancouver 2, B. C.

RAMBO, J. H. TOM, Otolar. 1948
434 E. 52nd, N. Y. C.

RAYNES, ALPHONSE F., Oph., 1923
16 Market Sq., Portsmouth, N. H.

REAGAN, DANIEL J., Oph. 1943, Otolar. 1944
507 Main, Worcester, Mass.

REED, GEORGE F., (a. Otolar.), Otolar. 1952
243 Charles, Boston, Mass.

REGAN, CHARLES D. J., (a. Oph.), Oph. 1953
520 Commonwealth Ave., Boston, Mass.

RICE, THEODORE A., Oph. 1942
390 Main, Worcester, Mass.

RICE, EARLE W., Otolar. 1953
390 Main, Worcester, Mass.

RICHARDS, LYMAN G., (cons. s. Otolar.), Otolar. 1924
Medical Department, Massachusetts Institute of Technology, Cambridge, Mass.

RICHARDSON, JOHN R., (s. BRON. & ESOPH.), Otolar. 1935
403 Commonwealth Ave., Boston, Mass.

RIEMER, KARL, (a. s. Oph.), Oph. 1943
403 Commonwealth Ave., Boston, Mass.

ROGERS, WILLIAM P., JR., (a. Otolar.)
264 Beacon, Boston, Mass.

ROOPENIAN, ARAM, (a.s.p.o. Otolar.), Otolar. 1944
475 Commonwealth Ave., Boston, Mass.

ROTHWELL, STEPHEN C., Otolar. 1925
Monquitt, Mass.

RUBEN, MAURICE, (a. s. Otolar.)
151 Maple, Springfield, Mass.

RUGGLES, RALPH H., (cons. s. Oph.), Oph. 1920
394 Marlborough, Boston, Mass.

RUNGE, PAUL A., (a. Oph.)
140 Marlborough, Boston, Mass.

SACHS, BARUCH, (r. Oph.)

SACHS, BENJAMIN, (cons. s. Oph.), Oph. 1925
636 Beacon, Boston, Mass.

SAEED, YUNIS M., Otolar. 1954
Brockton Hospital, Brockton, Mass.

SAINSBURY, AUGUSTUS W., Otolar. 1943
42 N. Main, Canandaigua, N. Y.

SAKUDO, AKIRA, (r. Otolar.)

SAM, JAMES M., Otolar. 1949
Jones Eye, Ear, Nose & Throat Hospital, Johnson City, Tenn.

SARGENT, FRANCIS B., Aural & Lar., 1923
124 Waterman, Providence, R. I.

SAVAGE, ROSS E., Oph. 1910
Gloucester, Mass.

SCARNEY, HERMAN D., Oph. 1928
573 Fisher Bldg., Detroit, Mich.

SCHALL, LEROY A., (c. Otolar.)
243 Charles, Boston, Mass.

SCHEPENS, CHARLES L., (a. Oph., dir. Retina Fd.)
327 Charles, Boston, Mass.

SCHNEBLY, J. THOMAS, Oph. 1936
900 17th, N. W., Washington, D. C.

SCOTT, ALFRED W., (r. Oph.)

SCOTT, DAVID H., (a. Oph.), Oph. 1949
7 Thorndike, Beverly, Mass.

SEALE, EARL S., (a. s. Oph.), Oph. 1940
126 Bay State Rd., Boston, Mass.

Shambaugh, George E., Jr., Otolar. 1932
55 E. Washington, Chicago, Ill.

Shea, John J., Otolar. 1953
3259 Overland Pl., Memphis, Tenn.

Sheehan, Linus A., Oph. 1943
210 Angell, Providence, R. I.

Sherman, Morris, Otolar. 1950
82 W. Commerce, Bridgeton, N. J.

SHLOSSBERG, FRANK R., (a. s. Otolar.)
116 Emerson, Haverhill, Mass.

Skilling, Francis C., Oph. 1933
442 Ingram Bldg., Miami, Fla.

Slaughter, Earl C., Otolar. 1940
Granada Bldg., Norfolk, Neb.

SLOANE, ALBERT E., (a. s. Oph.)
416 Marlborough, Boston, Mass.

Smith, Harold, Otolar. 1937
1149 N. Garvey Ave., Pomona, Cal.

SMITH, TAYLOR R., (a. Oph.), Oph. 1951
243 Charles, Boston, Mass.

Smith, William L., Oph. 1950
U. S. Naval Hospital, St. Albans, L. I., N. Y.

Snow, Robert C., Otolar. 1940
202 E. S. Temple, Salt Lake City, Utah

Spinola, Edmund T. L., Otolar. 1954
Rua Marechal Floriano 19, Bahia, Brazil, S. A.

Spratt, Charles N., Oph. 1904
1231 Medical Arts Bldg., Minneapolis, Minn.

Stapff, Volker H., Otolar. 1952
Av. Uruguay 826, Montevideo, Uruguay, S. A.

Stephens, H. Frederick, Oph. 1939
195 Thayer, Providence, R. I.

STERNSTEIN, HERMAN J., (assoc. s. Otolar.)
416 Marlborough, Boston, Mass.

STONE, WILLIAM, JR., (a. Oph.), Oph. 1949
1101 Beacon, Boston, Mass.

SUDARSKY, RAYMOND D., (r. Oph.)

SULLIVAN, GARRETT L., (a. s. Oph.), Oph. 1938
101 Bay State Rd., Boston, Mass.

SWARTZ, MORRIS, (a. Otolar.)
124 Ocean, Lynn, Mass.

Tegelberg, Julius, Otolar. 1931
390 Main, Worcester, Mass.

Thomas, John H., Otolar. 1944, Oph. 1946
262 E. Market, Warren, Ohio

THOMPSON, PETER HUNTER, (cons. s. Oph), Oph. 1902
308 Commonwealth Ave., Boston, Mass.

THORLAKSON, NEIL F., (r. Oph.)

TOBEY, HAROLD D., (cons. s. Otolar.), Aural 1915
403 Commonwealth Ave., Boston, Mass.

Toot, J. Frederick, Oph. 1922
520 First Nat'l Bank Bldg., Canton, Ohio

TRAKAS, JOHN C., (a. Otolar.)
1269 Beacon, Brookline, Mass.

TROTTER, ROBERT R., (a. Oph.), Oph. 1951
Howe Lab., 243 Charles, Boston, Mass.

Twitchell, Marshall C,. Oph. 1941
217 S. Union, Burlington, Vt.

Vail, Derrick T., Oph. 1924
700 N. Michigan Ave., Chicago, Ill.

VERHOEFF, FREDERICK H., (cons. c. Oph.)
395 Commonwealth Ave., Boston, Mass.

Viger, Roland J., Oph. 1937
1414 Drummond, Montreal, Que., Canada

WAITE, J. HERBERT, (cons. s. Oph), Oph. 1923
7 Bay State Rd., Boston, Mass.

WALKER, D. HAROLD, (cons. s. Otolar.), Aural 1902
Peterborough, N. H.

Wattles, F. Merrill, Otolar. 1938
1200 S. Kuhl Ave., Orlando, Fla.

Webster, Franklin R., Oph. 1926
810 State Tower Bldg., Syracuse, N. Y.

WEBSTER, RICHARD C., JR., (s. Otolar.)
1101 Beacon, Boston, Mass.

WEILLE, FRANCIS L., (s. Otolar.), Otolar. 1929
247 Commonwealth Ave., Boston, Mass.

Weisman, Herman J., Otolar. 1944
76 Limerock, Rockland, Me.

WEST, FRANCIS J., (a. s. Oph.), Oph. 1947
1101 Beacon, Brookline, Mass.

WHITE, LEON E., (cons. s. Otolar.), Aural & Lar. 1923
395 Commonwealth Ave., Boston, Mass.

WHITNEY, RAYMOND C., Oph. 1922
227 Union, New Bedford, Mass.

WILKINS, SAMUEL H., (cons. s. Oph.)
270 Commonwealth Ave., Boston, Mass.

WILLIS, HARRY C., Aural & Lar. 1923
216 E. Nash, Wilson, N. C.

WINKLER, HERMAN A., Otolar. 1926
224 Thayer, Providence, R. I.

WISHART, DAVID E. S., Aural & Lar. 1922
170 St. George, Toronto, Ont., Canada

WOODARD, M. WAYNE, Oph. 1950
517-519 Flat Iron Bldg., Asheville, N. C.

WRIGHT, CLARENCE F., Otolar. 1931
Weston, Ont., Canada

WRIGHT, EDWARD N., Otolar. 1933
103 May, S., Fort Williams, Ont., Canada

ZACHARIAS, LEONA, (fel. in Oph.)
243 Charles, Boston, Mass.

ZANEK, OTTO L., Oph. 1946
1704 Espercon Bldg., Houston, Tex.

ZEAVIN, BERNARD, (a. Oph.), Oph. 1954
101 Bay State Rd., Boston, Mass.

ZONDERMAN, BERNARD, (a. s. Otolar.), Otolar. 1946
285 Commonwealth Ave., Boston, Mass.

ZOVICKIAN, ANTHONY, (a. Otolar.)
270 Commonwealth Ave., Boston, Mass.

In Memoriam

HARRY A. BARNES, M.D.
Consulting Surgeon in Otolaryngology

1911—Assistant in Laryngology; 1920—Associate in Laryngology; 1925—Surgeon in Otolaryngology; 1933—Associate Surgeon in Laryngological Teaching; 1933—Consulting Surgeon in Otolaryngology.

EDMUND W. CLAP, M.D.
Consulting Surgeon in Ophthalmology

1901—Assistant Surgeon in Ophthalmology; 1912—Surgeon in Ophthalmology; 1941—Consulting Surgeon in Ophthalmology.

JOSIAH E. QUINCY, M.D.
Consulting Surgeon in Otolaryngology

1926—Clinical Assistant in Otolaryngology; 1932—Assistant Surgeon in Otolaryngology; 1949—Associate Surgeon in Otolaryngology; 1951—Consulting Surgeon in Otolaryngology.

HUGO B. C. RIEMER, M.D.
Consulting Surgeon in Ophthalmology

1929—Associate Surgeon in Ophthalmology; 1931—Surgeon in Ophthalmology; 1936—Consulting Surgeon in Ophthalmology.

HARRIS P. MOSHER, M.D.
Consulting Surgeon in Otolaryngology

1906—Assistant Aural Surgeon; 1912—Associate Laryngologist; 1913—Aural Surgeon; 1913—Laryngologist; 1921—Chief of Laryngology; 1925—Aural Chief of Service; 1933—Chief of Otology and Laryngology; 1939—Consulting Surgeon in Otolaryngology.

Member of

BOSTON HOSPITAL COUNCIL

AMERICAN HOSPITAL ASSOCIATION

MASSACHUSETTS HOSPITAL ASSOCIATION

UNITED COMMUNITY SERVICES OF METROPOLITAN BOSTON

APPROVED BY THE AMERICAN COLLEGE OF SURGEONS

AND THE AMERICAN MEDICAL ASSOCIATION

AFFILIATED WITH THE HARVARD MEDICAL SCHOOL

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Massachusetts
Eye and Ear Infirmary

ONE HUNDRED and TWENTY-NINTH

ANNUAL REPORT

1954-1955

BOSTON 14, MASSACHUSETTS

Massachusetts Eye and Ear Infirmary

ONE HUNDRED and TWENTY-NINTH

ANNUAL REPORT

1954-1955

Feby 23 1827

243 CHARLES STREET
Telephone: LAfayette 3-8230

BOSTON 14, MASSACHUSETTS

18

MASSACHUSETTS EYE AND EAR INFIRMARY

Incorporated in 1827

The Massachusetts Eye and Ear Infirmary and its Clinics serve men, women, and children from all over New England and beyond who need expert care for diseases and injuries of the eye, ear, nose, and throat. Established in 1824, the Infirmary is one of the two oldest hospitals in the country specializing in the preservation of good eyesight and sound hearing.

The infirmary is a voluntary hospital — an independent, non-profit, private institution. The Board of Managers are non-paid and the Staff of specialists give their services without charge to patients in the clinics and on the wards. The hospital receives no support from city or state but is financed by receipts from patients, by voluntary gifts and bequests, and by its share in the Community Fund as a "Red Feather Service." However, the Infirmary's allotment from the Community Fund is not sufficient to cover the amount the hospital gives in "free service" to patients from the Greater Boston area who cannot pay for their own care.

In many ways the Infirmary and the Massachusetts General Hospital, its neighbor, cooperate to give complete medical service to patients. The clinics of both hospitals share a common Admitting Office with its entrance on Fruit Street. Also, for maximum efficiency and economy, the two hospitals unite in such matters as purchasing, maintenance, and personnel management.

The wards and clinics of the Infirmary are open to those who are not able to pay doctors' fees, since the Staff give their services without charge to such patients. Every patient, in the clinics and wards as well as in the private accommodations, is under the medical and surgical care of Staff doctors who are specialists in Ophthalmology and Otolaryngology.

Whenever the patient is already under the care of a doctor, arrangements for his admission to the Infirmary should be made by his own doctor, or the patient should bring a letter from his doctor recommending admission to the hospital. However, any patient who is not under a doctor's care and who is not able to pay for private care, is eligible for treatment in the clinics and wards. In cases of emergency, of course, a patient is admitted immediately at any time of the day or night.

The Clinics, located on Fruit Street, are open daily except Sunday and legal holidays* for a fee of \$2.50† per clinic visit. After a preliminary interview, patients are examined by the clinic doctor and treatment is prescribed. If further treatment is necessary, the clinic patient is given an appointment for his next visit, as all but the first visit are by appointment only.

Patients are admitted to the wards by direct appointment with the Admitting Office, 243 Charles Street, from 9 to 10 A.M. daily except Sunday and legal holidays. Arrangement for admission to private and semi-private accommodations is made by the Staff doctor in charge of the patient, who then comes on the appointed day to the Infirmary Admitting Office.

Daily rates for board and room for ward patients are \$16† with special services like X-Ray and operating room fees, extra. Rates for child patients are \$16† in the ward, with semi-private charges of \$20†. For adults, semi-private care on the fourth floor is in four-, five- and six-bedrooms at \$17† to \$21† per day. Private care is \$23† to \$26† for single room with lavatory, and \$32† for single room with bathroom. These rates include general nursing and ordinary medicine. Private care for detached retina patients on the ninth floor of Baker Memorial Hospital is \$20† for a four-bed room, and \$24† for private room.

Blue Cross (Associated Hospital Service) plans are accepted at the Infirmary, the benefits being allowed as soon as approval has been received. All other non-profit insurance is handled by the patient for himself, and he pays the regular rates to the hospital.

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* Ear, Nose and Throat Clinic not open Saturdays in July and August.

† As of December, 1955.

Officers

BOARD OF MANAGERS, 1955

President	Henry Hixon Meyer, 53 State Street, Boston	1937
Secretary	Judge Edmund V. Keville, Pemberton Sq., Boston	1942-43, 1945
Treasurer	Horace W. Frost, 74 State Street, Boston	1940

William H. Claflin, III	74 State Street, Boston	1947
Mrs. Richard Cary Curtis	Manchester, Mass.	1940
Wallace Falvey*	10 Post Office Square, Boston	1950
Robert H. Hopkins	82 Devonshire Street, Boston	1951
James C. Howe	53 State Street, Boston	1914
Rev. Robert G. Metters	15 Newbury Street, Boston	1948
Patrick A. O'Connell*	154 Tremont Street, Boston	1934
William A. Parker	200 Berkeley Street, Boston	1935
Mrs. Sullivan A. Sargent	701 South Street, Needham	1945
Walter H. Trumbull	185 Meadow Brook Road, Weston	1929
Frederic Winthrop	Groton House, Ipswich	1943

* appointed by the Commonwealth

Corporation

(in addition to Managers)

William S. Ballard	45 Milk Street, Boston
Robert F. Bradford	53 State Street, Boston
Melville Chapin	84 State Street, Boston
Richard P. Chapman	28 State Street, Boston
William Ehrlich	120 Kingston Street, Boston
Mrs. John W. Farley	898 South Street, Needham
Nathaniel Faxon, M.D.	West Falmouth, Mass.
Francis W. Hatch, Jr.	N. E. Mutual, 501 Boylston St., Boston
Richard Harte, Sr.	307 Hammond Street, Chestnut Hill
Thomas H. Hoare	6 Beacon Street, Boston
Weston Howland, Jr.	75 Federal Street, Boston
Mrs. Francis T. Hunter	56 Lawrence Road, Chestnut Hill
Mrs. Varaztad H. Kazanjian	191 Clifton Street, Belmont
William F. Keesler, Jr.	342 Beacon Street, Boston
Arthur T. Lyman	37 Thatcher Street, Westwood
George A. McLaughlin	11 Pemberton Square, Boston
August R. Meyer	53 State Street, Boston
Miss Amelia Peabody	120 Commonwealth Avenue, Boston
George L. Pew	17 Storer Street, Portland, Maine
Henry K. Porter	74 Foley Street, Somerville
Huston Rawls	84 State Street, Boston
Honorable Leverett Saltonstall	82 Devonshire Street, Boston
Arthur L. Sherin	80 Federal Street, Boston
Frederick H. Verhoeff, M.D.	395 Commonwealth Avenue, Boston
D. Harold Walker, M.D.	"Tree Tops," Peterborough, N. H.
Howland S. Warren	1 Federal Street, Boston

Committees

EXECUTIVE COMMITTEE

Mr. Henry Hixon Meyer, *Chr.*
Mr. Horace W. Frost
Mr. William H. Claflin, III
Rev. Robert G. Metters

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Mr. Horace W. Frost
Mr. William A. Parker

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Dr. Edwin B. Dunphy
Dr. Charles L. Schepens
Mr. Francis S. Hill
Mr. Denholm M. Jacobs

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Dr. Herman J. Sternstein
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Dr. David G. Cogan
Dr. Charles L. Schepens
Dr. William Stone, Jr.
Dr. Henry F. Allen
Dr. Endre Balazs
Dr. W. Morton Grant
Dr. Robert H. Gohd
Dr. Mahlon Hoagland, *Ex. Sec.*

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Mr. Arthur L. Sherin
Mr. Francis S. Hill

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Mr. Robert H. Hopkins
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Dr. Moses H. Lurie
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Dr. Abraham Pollen
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Vice-Chairman	Mrs. Francis T. Hunter
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Mrs. Robert Truesdale
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Mrs. George Vinsonhaler
Mrs. Lyon Weyburn
Mrs. Andrew Winslow, Jr.
Mrs. Stewart C. Woodworth

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Mrs. Harris P. Mosher

Department of Ophthalmology

Chief of Ophthalmology

Edwin B. Dunphy, M.D.

Consulting Chief of Ophthalmology

Frederick H. Verhoeff, M.D.

Surgeons in Ophthalmology

Paul A. Chandler, M.D.
William P. Beetham, M.D.
Virgil G. Casten, M.D.
Trygve Gundersen, M.D.
David G. Cogan, M.D.
Brendan D. Leahey, M.D.

Associate Surgeons in Ophthalmology

Hugh C. Donahue, M.D.
Mahlon T. Easton, M.D.

Assistant Surgeons in Ophthalmology

Albert E. Sloane, M.D.
Edward E. Covitz, M.D.
Paul G. Haire, M.D.
Garrett L. Sullivan, M.D.
S. Forrest Martin, M.D.
Thomas Cavanaugh, M.D.
Henry A. Mosher, M.D.
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A. William Collinson, M.D.
Carl C. Johnson, M.D.
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Harry E. Braconier, M.D.
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Charles H. McLaughlin, M.D.
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Joseph M. Clough, M.D.
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Henry F. Allen, M.D.

Assistants in Ophthalmology

D. Robert Alpert, M.D.
Peter Beck, M.D.
Frederic Breed, M.D.
Robert J. Brockhurst, M.D.
S. James Bullington, M.D.
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David D. Donaldson, M.D.
Knud K. Dreisler, M.D.
(leave of absence)
Edwin B. Goodall, M.D.
Warren D. Haley, M.D.
Linley C. Happ, M.D.
John M. Hill, M.D.
Robert J. Herm, M.D.
Joseph Lo-Presti, M.D.
Irwin T. Mancall, M.D.
Daniel F. Milam, M.D.
Arthur M. Morrissey, M.D.
Bertha Offenbach, M.D.
Ichiro D. Okamura, M.D.
Irving Pavlo, M.D.
Richard D. Pippitt, M.D.
Charles D. Regan, M.D.
Paul A. Runge, M.D.
Alfred W. Scott, M.D.
David H. Scott, M.D.
William Stone, Jr., M.D.
Robert R. Trotter, M.D.
Bernard H. Zeavin, M.D.
(military leave of absence)

Residents in Ophthalmology

Edward J. Bechtel, M.D.
Joseph L. Dowling, Jr., M.D.
Carl G. Freese, M.D.
Merrill J. King, Jr., M.D.
Frank A. Perreten, M.D.
Charles J. Rife, M.D.
Baruch J. Sachs, M.D.
Raymond D. Sudarsky, M.D.
Irvin S. Taylor, M.D.
Neil F. Thorlaksen, M.D.

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Endre Balazs, M.D.
Marie Jakus, Ph.D.
Silvio R. Pirquet, M.D.
Alvaro Rodriguez, M.D.
Leona Zacharias, Ph.D.

Consulting Surgeons in Ophthalmology

Merrill J. King, M.D.
Ralph H. Ruggles, M.D.
Benjamin Sachs, M.D.
J. Herbert Waite, M.D.
Samuel Wilkins, M.D.

Consultant in Eye Pathology

Parker Heath, M.D.

Department of Otolaryngology

Chief of Otology and Laryngology

LeRoy A. Schall, M.D.

Surgeons in Otolaryngology

Francis L. Weille, M.D.
Maurice G. Evans, M.D.
Vincent J. Kelley, M.D.
Charles H. Allman, M.D.
Walter J. E. Carroll

Surgeon for the Service for the Deaf

Philip E. Meltzer, M.D.

Surgeon for Bronchoscopy and Esophagoscopy

John R. Richardson, M.D.

Surgeon for Tumor Clinic

Carl H. Ernlund, M.D.

Surgeon for Plastic Operations

Edgar M. Holmes, M.D.

Associate Surgeons in Otolaryngology

John R. Frazee, M.D.
Joseph Lentine, M.D.
Burton E. Lovesey, M.D.
J. Charles Drooker, M.D.
Herman J. Sternstein, M.D.
Donald K. Lewis, M.D.
Daniel Miller, M.D.
John E. McKeigue, M.D.

Assistant Surgeons in Otolaryngology

Elizabeth DeBlois, M.D.
Calvin M. Cerrato, M.D.
(leave of absence)
Frank R. Schlossberg, M.D.
Bernard Zonderman, M.D.
Charles Kent, M.D.
Edward F. Lawlor, M.D.
Maurice Ruben, M.D.
Kenneth Kazanjian, M.D.
George F. Reed, M.D.

Assistant Surgeon for Plastic Operations

Aram Roopenian, M.D.

Assistants in Otolaryngology

Hugo D. Angelini, M.D.
Lawrence S. Hirsch, M.D.
Frederic McIntire, Jr., M.D.
William P. Rogers, Jr., M.D.
Morris Swartz, M.D.
Richard C. Webster, Jr., M.D.
Anthony Zovickian, M.D.
William W. Montgomery, M.D.

Residents in Otolaryngology

Aldolpho B. Branco, M.D.
Samuel C. Doyle, M.D.
Stuart M. Frame, M.D.
Louis D. Griffey, M.D.
Alfred P. Hurst, M.D.
(leave of absence)
Robert E. Klotz, M.D.
William Patterson, M.D.
Mendell Robinson, M.D.
Jacob Sade, M.D.
Arthur Woodward, M.D.
Julio U. Zavalia, M.D.

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Frederick L. Bogan, M.D.
Gustave B. Fred, M.D.
Joseph L. Goodale, M.D.
Robert L. Goodale, M.D.
Edwards W. Herman, M.D.
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George H. Poirier, M.D.
Lyman G. Richards, M.D.
D. Harold Walker, M.D.
Leon E. White, M.D.

Roentgenologist

A. S. Macmillan, M.D.

Anesthesiologist

Jesse F. Brown, M.D.

Assistant Anesthesiologist

Constantin Hionides, M.D.

Director of Otolaryngological Pathology

Werner Mueller, M.D.

Research Associate

George Kelemen, M.D.

Director of Ophthalmic Pathology

David G. Cogan, M.D.

Bacteriologist

Anita Mangiarcine, A.B.

Research Virologist

Robert S. Gohd, Ph.D.

Associate Ophthalmic Pathologist

Taylor R. Smith, M.D.

Assistant Ophthalmic Pathologist

Toichiro Kuwabara, M.D.

Consulting Endoscopist

Edward B. Benedict, M.D.

Consulting Physicians

Fuller Albright, M.D.
Anthony C. Allison, M.D.
Joseph C. Aub, M.D.
Myles P. Baker, M.D.
Victor G. Balboni, M.D.
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J. Evarts Greene, M.D.
Harriet L. Hardy, M.D.
Reed Harwood, M.D.
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Alexander Leaf, M.D.
Jacob Lerman, M.D.
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Conger Williams, M.D.
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Chester N. Frazier, M.D.
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Mildred Ryan, M.D.
Maurice M. Tolman, M.D.
Robert F. Tilley, M.D.

Consulting Pathologists

William J. Brickley, M.D.
Benjamin Castleman, M.D.
Michael A. Luongo, M.D.
Winfield S. Morgan, M.D.
Robert E. Scully, M.D.
Donald C. Sniffen, M.D.
Edgar B. Taft, M.D.
Austin L. Vickery, Jr., M.D.

Consulting Radiologists

Joseph Hanelin, M.D.
Laurence L. Robbins, M.D.
Milford D. Schulz, M.D.
Stanley M. Wyman, M.D.

Consulting Bacteriologists

Louis Dienes, M.D.
Lawrence J. Kunz, Ph.D.

Consultant in Contagious Disease

Edwin H. Place, M.D.

Consultant in Preventive Medicine

John E. Gordon, M.D.

Consultant in Pharmacology

Otto Krayer, M.D.

Consulting Urologists

Sylvester B. Kelley, M.D.
Walter S. Kerr, M.D.
Wyland F. Leadbetter, M.D.
Saul M. Marcus, M.D.
Victor Politano, M.D.
Howard I. Suby, M.D.
Lorande M. Woodruff, M.D.

Consulting Neurologists

John A. Abbot, M.D.
Raymond D. Adams, M.D.
Madeline R. Brown, M.D.
Edwin M. Cole, M.D.
Philip R. Dodge, M.D.
Charles M. Fisher, M.D.
Vincent P. Perlo, M.D.
Huntington Porter, M.D.
Edward P. Richardson, M.D.
Robert S. Schwab, M.D.
Maurice Victor, M.D.

Consulting Psychiatrists

Herbert Barry, Jr., M.D.
Clemens E. Benda, M.D.
Carl A. L. Binger, M.D.
Gaston E. Blom, M.D.
Daniel C. Dawes, M.D.
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Avery D. Weisman, M.D.
LeMoyne White, M.D.
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Elizabeth Zetzel, M.D.

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T. Berry Brazelton, M.D.
Allan M. Butler, M.D.
Leo B. Burgin, M.D.
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Gerald A. Kerrigan, M.D.
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Arthur J. Linenthal, M.D.
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William Pferrer, M.D.
Gertrud C. Reyersbach, M.D.
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Nathan B. Talbot, M.D.
Richard C. Tefft, M.D.
Wilhelmina VanDyke, M.D.
Louis Weinstein, M.D.
Elenore C. Zaudy, M.D.

Consulting Surgeons

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Bradford Cannon, M.D.
Edward D. Churchill, M.D.
Oliver Cope, M.D.
Gordon A. Donaldson, M.D.
F. Thomas Gephart, M.D.
John B. Graham, M.D.
Ward I. Gregg, M.D.
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E. Parker Hayden, M.D.
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Robert R. Linton, M.D.
William V. McDermott, Jr., M.D.
John B. McKittrick, M.D.
Horatio Rogers, M.D.
Gordon Scannell, M.D.
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Grantley W. Taylor, M.D.
Howard Ulfelder, M.D.
William R. Waddell, M.D.
Claude E. Welch, M.D.
Frank C. Wheelock, Jr., M.D.

Consulting Neurosurgeons

H. Thomas Ballentine, Jr., M.D.
William H. Sweet, M.D.
James C. White, M.D.

Consulting Orthopedists

Otto E. Aufranc, M.D.
Joseph S. Barr, M.D.
Thomas F. Broderick, Jr., M.D.
Thornton Brown, M.D.
Edwin F. Cave, M.D.
Robert J. Joplin, M.D.
Paul L. Norton, M.D.
Eugene Record, M.D.
John A. Reidy, M.D.
Carter Rowe, M.D.

Service Pins

Members of the Medical Staff receiving the two-star pin for 25 consecutive years on the active staff:

Virgil A. Casten, M.D.
Edward E. Covitz, M.D.
Hugh C. Donahue, M.D.
John R. Frazee, M.D.
Trygve Gunderson, M.D.
Edgar M. Holmes, M.D.
Vincent J. Kelley, M.D.

Ten Year Pins

Aleta L. Allen, R.N.
Eye Clinic

Adele Dragon
Housekeeping

James Farley
Nursing

Frank Favuzza
Elevator Operator

Virginia Gerould
Public Relations

Hattie Jones
Dietary

Dorothy Landers, R.N.
ENT Clinic

Phillip Maguire
Nursing

The Clinics

Assistant Director in charge of Clinics . . . . E. Michael White
Executive Officer . . . . Ruth Farrissey, R.N.

EYE CLINIC
- Glaucoma Consultation Service
- Ocular Motility Clinic
- Refraction Department
- Retina Service

EAR, NOSE AND THROAT CLINIC
- Hearing Test Room
- Esophageal Speech Training
- Consultation:
  - Allergy Clinic
  - Plastic Clinic
  - Tumor Clinic

Howe Laboratory of Ophthalmology

Director
David G. Cogan, M.D.

W. Morton Grant, M.D.
David D. Donaldson, M.D.
Robert R. Trotter, M.D.
Jin H. Kinoshita, M.D.
Toichiro Kuwabara, M.D.
Harold L. Kern, Sc.D.
Thomas Masurat, A.B.
Lorenzo O. Merola, B.S.

Winthrop Foundation and Clinic for the Deaf

Surgeon in Charge
Philip E. Meltzer, M.D.

Associate Surgeon in Charge
Donald K. Lewis, M.D.

Surgeon
Francis L. Weille, M.D.

Assistant Surgeon
Bernard Zonderman, M.D.

Audiologist
Alan Feldman

Executive Committee
D. Harold Walker, M.D., *Chairman*
LeRoy A. Schall, M.D.
Donald K. Lewis, M.D.
Moses H. Lurie, M.D.
Philip E. Meltzer, M.D.

Retina Foundation

Director
Charles L. Schepens, M.D.

Associate Director
Endre A. Balazs, M.D.

Marie A. Jakus, Ph.D.
Laszo Varga, Ph.D.
Arthur F. Howe, Ph.D.
Natalie H. Mayer, Ph.D.
Ichiro D. Okamura, M.D.
Robert J. Brockhurst, M.D.
Silvio R. Von Priquet, M.D.
Alvaro Rodriguez, M.D.
Christine T. Bothner-By, Ph.D.
Gordon L. Brownell, Ph.D.
John Gergely, M.D., Ph.D.
Charles V. Mahlmann, M.S.
Robert J. Herm, M.D.

Boston Eye Bank Serving New England

Executive Committee
Edwin B. Dunphy, M.D.
Brendan D. Leahey, M.D.
Mrs. William A. Slade, Jr.
Henry Hixon Meyer
William S. Ballard

General Director: Garrett L. Sullivan, M.D.
Executive Secretary: June Vine

Treasurer's Report

BALANCE SHEET
October 2, 1955

ASSETS

Cash in Bank and on Hand		$ 464,627.09
Investments - Book Value:		
Securities	$3,729,898.44	
Interest in parcel of real estate	1.00	
Interest in unsettled estate	1.00	3,729,900.44
Accounts Receivable:		
Patients - less reserve for doubtful accounts	$ 105,058.75	
Miscellaneous	14,362.19	119,420.94
Inventories of Supplies, Etc.		19,115.59
Plant:		
Land and buildings acquired prior to January 1, 1949 (book value)	$ 491,741.99	
Additional facilities acquired since January 1, 1949 (cost)	890,703.47	
	$1,382,445.46	
Less: Reserve for depreciation	188,000.00	1,194,445.46
Construction in Progress		677,048.91
TOTAL		$6,204,558.43

LIABILITIES AND FUNDS

Advances from Patients	$ 3,409.35
Accounts Payable and Accruals	74,960.99
Special Funds	(3,905.03)
General Fund	2,828,850.14
General Pension Reserve	163,164.31
Research Fund	20,000.00
Permanent Funds - Income Restricted	721,503.42
Permanent Funds - Income Unrestricted	2,227,538.93
Special Purpose Funds	134,191.22
Unexpended Restricted Income of Permanent Funds	34,845.10
TOTAL	$ 6,204,558.43

INCOME ACCOUNT

For the period ended October 2, 1955 (52 weeks)

Hospital Income as per Director's Report			$1,468,683.59
Less: Hospital expenses as per Director's report — See Note		$1,773,455.69	
Hospital Operating expenses charged directly against Permanent Funds		25,641.64	
		$1,799,097.33	
Deduct: Hospital operating expenses charged directly against Permanent Funds:			
Permanent Funds — Income	$11,820.07		
Permanent Funds — Principal	13,821.57	25,641.64	
Net Hospital Expenses			1,773,455.69
Excess of Hospital Expenses over Hospital Income			$ 304,772.10
Income from investment securities, less income applicable to Restricted Funds		$ 180,747.68	
Receipts from United Community Services, Committee of the Permanent Charity Fund, Inc., Estates of Elisha V. Ashton, G. Gorham Peters and others		53,975.79	
		$ 234,723.47	
Less: Treasurer's Disbursements		12,938.48	221,784.99
Deficit for the Period			$ 82,987.11

Note: Includes provision for depreciation — $98,000

AUDITORS' CERTIFICATE

We have examined the balance sheet of Massachusetts Eye and Ear Infirmary as at October 2, 1955 and the related income account for the period ended at that date (52 weeks).

Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The accompanying statements reflect a provision for depreciation in the amount of $98,000, based on a percentage of the patient care expenses of the Infirmary. This provision has been recorded in accordance with the requirements of statutory authority pertaining to per diem reimbursement for hospital services rendered under contract with certain third party agencies. We are unable to express an opinion as to the adequacy of the provision for depreciation in relation to plant costs.

Subject to the exception noted above, in our opinion, the accompanying balance sheet and related income account, with their supporting exhibits, present fairly the financial position of Massachusetts Eye and Ear Infirmary at October 2, 1955 and the results of its operations for the period ended at that date, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding period.

Patterson, Teele & Dennis

SUMMARY OF INVESTMENTS

	*Book Value**	*Market Value**	*% Market Value*
Bonds:			
U. S. Government	$1,041,925	$1,034,390	17.2%
Canadian Government	29,400	29,700	0.5%
Railroad	225,867	224,425	3.7%
Public Utility	44,142	43,560	0.7%
Industrial	82,003	82,480	1.4%
Financial	71,617	70,800	1.2%
Miscellaneous	1,000	1,000	....
Total Bonds	$1,495,954	$1,486,355	24.7%
Preferred Stocks:	$ 130,658	$ 171,250	2.8%
Common Stocks:			
Railroad	$ 170,355	$ 366,300	6.1%
Public Utility	414,414	637,825	10.6%
Industrial	846,882	2,306,892	38.3%
Bank, Insurance & Miscellaneous	553,581	874,964	14.5%
Investment Trust	25,000	44,950	0.8%
Total Common Stocks	$2,010,232	$4,230,931	70.3%
Total General Fund	3,636,844	5,888,536	97.8%
Winthrop Fund	82,554	123,250	2.0%
Weber Fund	10,500	10,372	0.2%
Grand Total	$3,729,898	$6,022,158	100.0%

* Cents omitted.

OPERATING ANALYSIS

For the period ended October 2, 1955 (52 weeks)

Income from Patients	$1,567,182.52
Income from Other Sources	72,459.15
Total Gross Hospital Income	$1,639,641.67
Allowances to Patients for "free care"	100,993.20
Further Deductions for Bad Debts	16,905.98
Allowances to Blue Cross and Other Agencies	53,058.90
Total Free Service	$ 170,958.08
Net Income	1,468,683.59
Salaries and Wages	$ 964,333.75
Supplies and Expenses	494,446.43
Clinic Expenses	199,942.69
Extraordinary Expenses	16,732.82
Total Operating Expenses	$1,675,455.69
Depreciation	98,000.00
Hospital Deficit	206,772.10
Total Hospital Deficit	$ 304,772.10

Horace W. Frost,
Treasurer

Administration

Director	Francis S. Hill
Assistant Director	Charles T. Wood
Administrative Assistants, Admitting Office	Henrietta Olsen, R.N. Ruth W. Hutchinson, R.N. Mrs. Ethel M. Devine, R.N. Ruth Straitiff
Associate Director for Development and Resources	Denholm M. Jacobs

Nursing Department

Director of Nursing and Nursing Education	Mrs. Althea B. Brady, R.N.
Assistant Director of Nursing	Barbara Mathews, R.N.
Educational Director	Marjorie Haywood, R.N.

Directors of Departments

Accounting	Raymond W. Lyons
Dietary	Patricia Walsh
Housekeeping	Kenneth W. Cadman
Medical Social Service	Isabel Whiting
Occupational Therapy	Mrs. Patricia Huddleston
Optical Shop	Albert E. Maver
Public Relations	Mrs. Virginia Gerould

Directors of Units

Librarian	Charles Snyder
Patients' Accounts	Mrs. Marilyn M. Slade

Directors of Affiliated Departments

Director, School of Nursing and Nursing Service	Ruth Sleeper, R.N.
Clinics, Assistant Director	E. Michael White
Director of Dietetics, School of Dietetics	Louise Hatch
Medical Records	Mary E. Converse
Maintenance, Assistant	Joseph W. Degen
Personnel Director	Edmund R. Mattos
Pharmacy	John Murphy
Purchasing Agent	Joseph Hill

Comparative Statistics

HOSPITAL

	1954	1955
Ward Patients — Eye Cases	1,548	1,559
Ear, Nose and Throat Cases	1,277	1,192
Total admitted to Wards	2,825	2,751
Private Patients — Eye Cases	2,155	2,373
Ear, Nose and Throat Cases	1,978	1,943
Total Private Patients	4,133	4,316
Total Patients Admitted	6,958	7,067
Operations, Ward Patients — Eye Cases	1,449	1,464
Ear, Nose and Throat Cases	1,030	941
Operations, Private Patients — Eye Cases	2,338	2,487
Ear, Nose and Throat Cases	1,743	1,728
Total Operations	6,560	6,620

CLINICS

	1954	1955
New Patients — Eye Clinic	5,845	5,364
Ear, Nose and Throat Clinic	3,132	3,174
Total New Patients	8,977	8,538
Revisits — Eye Clinic	35,361	36,019
Ear, Nose and Throat Clinic	17,589	19,790
Total Clinical Revisits	52,950	55,809
Visits — Eye Clinic	41,206	41,383
Ear, Nose and Throat Clinic	20,721	22,964
Total Clinical Visits	61,927	64,347
Emergency Patients Admitted to Hospital	180	155
Patients Admitted to Emergency Ward	4,312	5,013

Comparative Statistics

	1954	1955
Patients Days Care — Wards	21,029	21,270
Private	25,050	27,250
TOTAL PATIENTS DAYS CARE	46,079	48,520
Average Number of Patients Treated Daily —		
Wards	58	58
Private	69	75
TOTAL AVERAGE TREATED DAILY	127	133
Average Number of Days Patients Remain — Wards	7+	6
Private	6	5
Beds Available and Percent of Occupancy — Wards	101 57%	91 64%
Private	89 77%	99 75%
TOTAL BEDS AVAILABLE	190	190
Per Capita Cost Per Day — Wards, Routine Care	$17.36	$18.38
Special Services	6.30	7.16
TOTAL COST PER DAY PER WARD PATIENT	$23.66	$25.54
Per Capita Cost Per Day—Semi-Private, Routine Care	$19.19	$18.76
Special Services	8.90	8.66
TOTAL COST PER DAY SEMI-PRIVATE PATIENT	$27.09*	$27.42*
Per Capita Cost Per Day — Private, Routine Care	$24.53	$23.85
Special Services	5.40	6.73
TOTAL COST PER DAY PER PRIVATE PATIENT	$29.93*	$30.58*
Condition of Ward Patients on Discharge — Died	11	7
Autopsies	64%	57%
Left Against Advice	0	0
Discharged	2,829	2,727

Percentage of "Free Care" — Compiled on Dollar Value, not including Blue Cross:

	1954	1955
House Patients	5.1%	4.2%
Out-Patients	26.0%	28.4%
TOTAL "FREE CARE"	9.7%	8.9%

* With Depreciation Added.

Report of the Board of Managers

I WISH in this report to consider the matter of hospital costs, to explain why they have increased so drastically during the past fifteen years, and to demonstrate, as I think I can, that hospital charges are moderate — not exorbitant. It is only by a clear statement that understanding can result.

Let us first consider the nature of a hospital, any hospital. It is built, organized, staffed, and equipped to care for the sick twenty-four hours of each and every day, Sundays and holidays included. Patients enter the hospital when they are sick, often in the middle of the night, and the hospital must be ready to receive and care for them whenever they come. All services must be available all the time, and the hospital must be staffed at all times to meet peak requirements which may occur at any time and cannot for the most part be predicted.

Unfortunately, too few patients and the public generally have little or no idea as to the operation and organization of a hospital. They are given a bed, receive nursing care, food and medicine, and see their doctor. Some may have an operation or an x-ray. None see the whole picture: the Admitting Office, the Clinics covering every aspect of medical care, the Nursing Department, Operating Rooms, Anesthesia Department, Eye Bank, laboratories of all kinds, X-ray Department, Pharmacy, Medical Record Library, Dietary and Housekeeping Department, Social Service Department, Kitchens, Supply and Utility Rooms, Bookkeeping Department, Maintenance Department, Public Relations Department, and most important of all, the General Administrative Offices where all the details of operating this little city in itself are focused and kept moving to accomplish the purposes for which the hospital exists. To compare a hospital with a hotel is to demonstrate a complete misunderstanding of the nature of a hospital.

Hospitals have another characteristic unusual in this machine age. They deal in personal service which cannot be mechanized. People, trained to a high degree in a great variety of skills, must care for the sick with their own hands, exercising judgment, providing sympathy and creating confidence. It is interesting to note that in 1946 the average general hospital required 1.48 employees per patient and in 1954 the same hospital required 1.98 employees per patient.

THE FACTS BEHIND HOSPITAL COSTS

While all I have said has always been true of hospitals, it is only during the last fifteen years that costs have increased so significantly. At the Infirmary the patient day cost rose from $6.52 in 1940 to $25.76 in 1955. That has been due to two factors. The first, of course, is inflation. The cost of everything bought by hospitals and the wages and salaries paid have increased many fold. A few examples of comparative costs at the Infirmary are illustrative.

	1940	*1955*	*% Increase*
Medicines	$ 16,000	$ 41,000	155
X-ray Supplies	3,700	6,100	60
Food Cost	52,000	93,000	78
Salaries & Wages	271,000	1,074,000	295

The second factor in rising hospital costs is the spectacular expansion which has occurred in medical and surgical skills and procedures and the discovery of the miracle drugs. Every step forward, and many more are in the making, calls for more skills, more staff, more equipment, more personal service. So up goes the cost, but more and more patients are being cured of conditions which were considered hopeless a few years ago, and the average time spent by a patient in the Infirmary has dropped from 7.6 days in 1940 to approximately 6 days in 1955. The end is not in sight, and we must expect that hospital costs will increase by about 5% each year for the foreseeable future.

While every effort will be made to control the cost of patient care at the Infirmary, costs cannot be reduced at the expense of service to the sick. Instead, we must find the ways and means of improving constantly in every field the quality of that service — otherwise, we shall not discharge our obligations to our community. The important point to remember is that with the passage of every year more and more people threatened with loss of sight or hearing are being cured at the Infirmary. No matter what the cost, that is a bargain.

The Infirmary nears the end of its program of rehabilitation started in 1950. The intervening years have placed a heavy burden upon the whole staff from Director to doorman. Nevertheless, they have kept operations at a high level of efficiency and during 1955 cared for more patients in the hospital than ever before. A tough job has been well done.

HENRY HIXON MEYER
President

Report of the Director

In reviewing the past year, it is natural to think first of our accomplishments. On the whole, it was a productive twelve months, and we are pleased to report:

1. A new pension plan became effective September 5, 1955.
2. We cared for more private patients than ever before in the Infirmary's long history.
3. We ended the year with a small operating surplus before depreciation.
4. Salaries were raised in many classifications including the nursing personnel.
5. The new research floors are nearing completion.
6. Finally, but not the least important, the architects solved the difficult problem of the front entrance which has been with us for so long. Reconstruction of this important area of the hospital was begun.

On the debit side, we must report an unusually large loss of our personnel, either because of retirement or the call to more responsible positions in other institutions. Also, we have been thoroughly disappointed by the delays that were encountered in our various construction projects. And perhaps our most pressing problem, the steadily increasing demand for more parking facilities, has as yet found no happy solution. We hope that new and stricter rules for issuing stickers, plus better policing, will bring at least temporary improvement by the first of January, 1956.

SOME YEARLY FIGURES AND STATISTICS

Financially, the Infirmary ended the year with a small surplus of $16,000 before depreciation. Although the Infirmary shows a figure for depreciation on its books, no money is actually set aside for replacement of building and equipment. The trend toward higher costs continued and expenditures reached $1,800,000 — the highest in the 131 year history of the hospital.

The average cost per patient day increased from $26.50 to $27.31 and there is every indication that this cost will continue to go higher in the coming months as a result of wage increases that will go into effect shortly after the end of the year.

Occupancy of hospital beds went up again and patient days reached 48,520 against 46,179 for 1954. It is interesting to review our occupancy statistics over the last 30 years. A change away from ward patients and a marked increase in the number of private patients is clearly illustrated. During these years, many beds have been converted from ward to private and this trend was continued in 1955.

Year	*Ward Patient Days*	*Private Patient Days*	*Total Patient Days*
1925	43,174	10,182	53,356
1930	40,063	9,756	49,825
1935	43,691	10,226	53,917
1940	42,016	10,669	52,685
1945	34,889	13,449	48,338
1950	26,252	11,738*	37,990*
1955	21,270	27,250	48,520

* Year the new 5th floor was under construction

A very marked change has also taken place in the type of patient we have in the hospital. Recent figures show a substantial increase in the number of patients coming to us for "total laryngectomy" and radical neck dissections. Taken together, these patients have more than doubled during the last five years, from 48 to 113. This again is a trend that shows every indication of continuing.

Another group of patients showing a startling increase are those coming to our Retina Service:

Number of new retina patients:

1948	1949	1950	1951	1952	1953	1954	1955	Total
366	343	408	488	460	614	618	1044	4,341

Number of retina operations:

1948	1949	1950	1951	1952	1953	1954	1955	Total
165	167	250	291	360	431	510	719	2,893

Based on the average percentage rate of increase over the eight years we might expect 2,472 detached retina patients in the year 1959 and over 1,000 operations. We continued renting twelve beds from the Massachusetts General Hospital on the 9th floor of Baker Memorial, to provide additional accommodations for these patients.

In 1955 the average required hospitalization for patients with detached retina was ten days against approximately thirty days in 1948. These figures indicate how imperative it is for us to recognize changing trends and incorporate them in our long-term plans for future growth.

THE NEW PENSION PLAN

The pension plan for employees went into effect September 5, after two years of study and planning. The administration of the Infirmary in collaboration with that of the Massachusetts General Hospital, spent many hours designing a plan that would benefit the employees of the hospital to the greatest extent possible with the funds available.

The plan, which will supplement the present social security, is for personnel who have been employed two years and are over thirty years of age. The benefits compare most favorably with similar plans in industry and the plan is one more step in the effort of the Board of Managers to make the Infirmary an attractive place to work. So-called fringe benefits will now amount to more than 11% of salaries. This is a sizeable contribution when it is considered that salaries represent approximately 68% of total expenses of the hospital.

CONSTRUCTION DURING THE YEAR

Because of delays in the delivery of materials and unforeseen difficulties encountered in constructing new floors on an old building, completion of the new research floors has been postponed from November until the first week in February. However, by the end of the year we were far enough along so that we could see what the new laboratories would be like and the Staff, on the whole, seemed pleased. The improvements, when compared with the old laboratories scattered throughout the hospital, should be a great stimulus to research at the hospital. The official inspection of the new floors is now being scheduled for some time in the spring.

Plans for the first floor renovations are now complete and work will start shortly after space is released by the laboratories as they move into the new research floors. Included in this planning will be a new patients' waiting room; a larger admitting area and accounting office; adequate emergency rooms; three doctors' offices, to be located in the area vacated by the Mosher Laboratory; and a gift shop for the Ladies' Visiting Committee. The Front Desk will be moved across the rotunda and will occupy the widened doorway leading into the present admitting area. With the renovation of the front entrance, we believe the functioning of the hospital in this most important "first impression area" will be tremendously improved.

The renovation of the basement was completed during the summer and is an example of what can be accomplished by remodeling an unprepossessing area in a hospital built in 1896. Changes in the Eye Clinic to make room for a new Glaucoma Service and the complete reconstruction of the Refraction Room also were completed before the close of our fiscal year.

Other less conspicuous but important construction was the installation of partitions in the large eye wards on the second and third floors, to accommodate either ward-private or service patients, depending on the need. With the continued decrease in service patients and increase in demands for private beds, this appears to be a logical step.

The planning of these projects, and the details inherent in supervising the construction, has taken a major portion of the time and effort of the administration during 1954 and 1955. At one time during the year, seven different projects were under way or in the planning stage at the same time.

NURSING DEPARTMENT OBJECTIVES

In May, the Director of the Nursing Department and her assistants retired, and the new nursing administration took over on that date. The importance of this major department to patient care, to the medical staff and other services in the hospital, such as teaching and research, cannot be overemphasized. Therefore, a review of the immediate problems the Nursing Department is facing and some of the plans they have for improving the nursing service in the future seems pertinent.

A complete change in nursing administration brings with it new ideas, often a different philosophy and a renewed enthusiasm for the job ahead. This is stimulating for the hospital but the period of adjustment often proves difficult for everyone. It was recognized that changes must be introduced gradually but in certain instances unforeseen conditions forced immediate decisions.

The first objective was the most important task of staffing. Because of the general shortage of nurses in the state, nursing personnel was needed first for adequate, and then for improved, patient care. Secondly, it was necessary to orient the new personnel to eye, ear, nose and throat nursing — the particular procedures used by our Staff and the many other requirements of a specialized institution.

In nursing education, we have been concentrating upon the graduate nurse course, as we believe that this is our future. The fact must be accepted that due, no doubt, to many contributing factors of which the following are the most important: (1) the major changes in health needs, (2) the inadequate supply of nurses to meet these needs, and (3) the revision of nursing educational programs, the number of nursing schools sending their students for affiliation to this hospital has dwindled to an alarming degree and will eventually stop entirely. The Massachusetts General Hospital is the only school at the present time that is sending affiliating students here. In March of this year, the educational program of even these few remaining students was cut down to a four week period which includes both classroom instruction and clinical experience. In addition to this, because of state requirements, these students are definitely limited as to the amount of evening and night duty that they do while on affiliation. This places another serious strain on our already difficult staffing problem.

Upon analyzing the whole situation, it was realized that there is a wealth of material for nursing education at the Eye and Ear Infirmary, but it must now be definitely placed on the graduate level of study.

The best way to promote this was to obtain college credit for our graduate program. Conferences with Boston University School of Nursing were planned. Arrangements are now under way for our course in eye, ear, nose, and throat nursing to be included in their 1956 announcement. It will be a two credit-one semester course. Along with this collegiate program, we will continue to offer our three months graduate course for the nurses who, while they do not wish college credits, do desire professional advancement.

It is through this training program that future replacements to our nursing staff will come. The importance of this cannot be overemphasized. By this time next year, we anticipate a strong, well coordinated Nursing Department dedicated to the special needs of our patients.

PROGRESS BY THE BOSTON EYE BANK

The Boston Eye Bank received more eyes — 114 — than ever before. This compares with 78 eyes in the same period last year and proves that public education is the best way to increase the amount of eye tissue received.

The Eye Bank's film, "Eyes of Service," continues to be the most successful means of education and billings for the film now average about five a month. Twenty-two TV commercials and Metropolitan Transit Authority car cards were used for the first time this year. For three months this summer, 500 MTA cars carried the Eye Bank cards which proved to be most successful advertising.

Another result of the publicity program was the increase in affiliated hospitals from 60 to 68. Without the assistance of these friendly institutions throughout the New England area, the Eye Bank would not be able to operate. We are proud of this self-supporting unit of the hospital which contributes such an outstanding service.

AN ACTIVE SOCIAL SERVICE DEPARTMENT

A recent statistical survey shows that the Infirmary has the largest Social Service budget of any hospital of its size in the state of Massachusetts. This is not surprising, as the Managers of the Eye and Ear were one of the first to recognize the advantages of a strong social service department, particularly in an institution specializing in the afflictions of blindness and deafness.

We have an active Department with a personnel of fourteen, and during the past year they gave a total of 8,300 consultations to a total of 2,600 patients. Special funds amounting to $13,400 were used to aid patients in many ways, including the financing of eye glasses or hearing aids. In addition, the Department carries an active teaching program with students affiliating from three colleges.

RENOVATIONS AID DIETARY SERVICE

During the year, the extensive renovations in the basement not only made the dietary area physically more attractive, but also had a direct bearing on operating efficiency. Storeroom control was improved and many steps were saved every day by the addition of an entrance to the walk-in refrigerators directly from the main kitchen. With the purchase of a large disposal for the kitchen, we have finally eliminated all garbage barrels in the Infirmary. The creation of a new tiled truck room in the old dishwashing area made it possible to move the food trucks from the main corridor into the kitchen.

During the year, nearly a quarter of a million meals were served, an increase of 13,000 over the previous year with a drop in cost of .014 per meal. Cafeteria meals increased 7,000 and continued the trend of popularity started four years ago. Two new tables were added which help us service approximately 300 persons at lunch time.

For a long time the Infirmary has had four different china patterns for the various classifications of patients. After much study, it was decided to begin the consolidation to one pattern. In November, 1955, the new china will be issued to the cafeteria, fourth and fifth floors. The wards will continue with the old pattern for another ten months, but when this is depleted, the wards also will get the new standard ware. The original change involves considerable expense and some loss, but the eventual result should be most satisfactory and economical. Joint purchasing can be combined with the requirements of the Massachusetts General Hospital and made on an annual basis, thus securing a most reasonable price.

There is no doubt that the morale of our Dietary Department is high and other personnel of the hospital join them in the pride they take in their new quarters and attractive corridors.

LADIES VISITING COMMITTEE LOOKS FORWARD TO A GIFT SHOP

The Ladies Visiting Committee continued their active support of the hospital with a membership which continued to increase. It now stands at 64 members, all of whom are called on for some service during the year, either in connection with the annual rummage sale, the cart shop or other hospital activity. Through their combined effort, over $4,000 was raised and contributions were made to nineteen different endeavors of the hospital ranging all the way from their regular assistance to the Social Service Department to the redecoration of the House Officers' sitting room.

Plans have been drawn for a gift shop to be located just off the main rotunda when the first floor renovations take place, and it is our expectation that by next fall it will be in active operation. The enthusiasm already shown by the Committee for this project is ample proof that it will be a successful source of future income.

CHANGES IN PERSONNEL

There were several important changes in administrative personnel during the year. The position of Associate Director was created and, in May, Mr. Denholm M. Jacobs joined us to devote his entire efforts to fund raising, future planning, and legislation that might affect the hospital.

Mrs. Geneva L. Wayland, Assistant Director, resigned at the year's end to take on new responsibilities as Administrator of the Gifford Memorial Hospital in Randolph, Vermont. Her place will shortly be taken by Mr. Charles T. Wood who comes to us from Roanoke, Virginia.

After three decades of service at the Infirmary, Miss Dorothy M. Tarbox, and Miss Hilda G. Blaisdell, Director and Assistant Director of Nursing, retired. A spontaneous testimonial dinner was arranged by their many friends and attended by over 200 members of the medical and nursing staffs. Mrs. Althea Brady became the new Director of Nursing Service and Nursing Education in May.

Mrs. Helen Kirwin, who had been with the Infirmary for 33 years in the Social Service Department and was a valued friend to generations of both patients and personnel, retired early in the summer. Miss Mary Shepard, Director of Nursing Education, also retired in the spring after making a real contribution to the hospital over a period of 3 years.

Finally, Mr. Roscoe Adams, head of the Housekeeping Department, left to become Housekeeper at the New England Deaconess Hospital in Boston. When Mr. Adams came to us, it was on an experimental basis. His contribution proved so successful that we plan to continue to have a man in this position which combines supervision of housekeeping, linen control, laundry and storeroom, inventory and receiving room. Mr. Kenneth Cadman will take Mr. Adams' place in the latter part of October.

IMPROVEMENTS IN PROSPECT

We close the year looking forward to the completion of the front entrance, the occupancy of the new research floors, and the start of reconstruction on the first floor. As a result of the recent increase in research, we are planning to add an accountant to spend the majority of his time on research projects.

Plans are under way for the re-allocation of all parking stickers for the Cloverleaf Parking area on a priority basis by both the Eye and Ear Infirmary and the Massachusetts General Hospital. Visitors and patients will be given numbered identification cards which must be stamped at the information desks in the various hospital units to verify a hospital visit.

A survey is in progress by the Telephone Company to improve the hospital telephone service. Plans are also under way to improve the handling of patient records. A new record librarian is taking over in the Record Room some time in November, to reorganize and revitalize this important department.

Francis S. Hill,
Director

Department of Ophthalmology

The most significant event in the past year has been the construction of three new floors on top of the connection building. These beautiful quarters, which we will share with our colleagues in otolaryngology, will house the Howe Laboratory, the library, and the laboratories for eye pathology, bacteriology, chemistry and the retrolental study. With this much-needed space now a reality, the Infirmary can look forward to more productive years of progress.

Another great physical improvement has been the remodeling of the Refraction Department. The modernization of this space has added greatly to the comfort and convenience of those whose task it is to refract patients. We now hope to raise funds to provide these new quarters with modern equipment.

AIDES FOR SUB-NORMAL VISION

A survey is in progress by the Telephone Company tion from the Boston Aid to the Blind of $3,000, which will equip one of the six refraction lanes. Dr. Sloane has collected a number of magnifying devices to aid patients whose defective vision cannot be improved by ordinary glasses. His lectures on this subject to residents and members of the staff have focused attention on a much-neglected field of ophthalmology. A total of 7,751 patients were refracted during the year; 52% of them being done by the residents.

The activity of the Ocular Motility Clinic was somewhat impeded this year due to construction in the adjacent Refraction Department and elevator alterations for the new research floors. This resulted in having to operate in very constricted space and under very trying circumstances. In spite of this, over 7,000 orthoptic examinations were performed; 549 of these being on private cases referred by staff doctors. Miss Ann Stromberg has been joined by Mrs. Rose Blumenthal as full-time assistant. All strabismus cases in the clinic are examined here and again on the day of their admission for surgery.

In the Perimetry Room, 1,040 visual field examinations were performed, somewhat more than last year. Dr. Garrett L. Sullivan continues to instruct the new residents in this important technique of ocular examination.

RETINA SERVICE PROGRESS

The number of detached retina cases coming to the Infirmary continues to increase. In the past year, a total of 1,044 new patients passed through the Retina Service, of whom 719 were operated upon. Dr. Charles Schepens, in charge of this Service, has gathered around him a group of enthusiastic young ophthalmologists, who are devoting the major part of their time to the care and study of these patients. Many visiting ophthalmologists from various parts of the world spend short periods of time on this Service, learning the new techniques of fundus examination and retinal surgery.

As a result of this "specialization within a specialty," there is no question but that a higher percentage of cures has resulted. The scleral buckling procedure, employing a polyethylene tube, is now used in most all cases of retinal detachment. One interesting aspect of the new surgical techniques has been the reduction of the average hospital stay of the detached retina patient from 21 days to eight days.

Dr. Ichiro Okamura has started a collection of photographs of unusual fundus conditions related to retinal detachment. Dr. Robert Brockhurst has begun a systematic study of cases of uveitis associated with retinal detachment. Dr. Silvio von Pirquet has been studying the tissue reactions in rabbits after they have had encircling polyethylene tubes sewn in their sclera for a few weeks.

In Eye Pathology, 589 specimens were examined, of which 366 were biopsies and 223 whole eyes. Dr. Taylor Smith has continued his weekly pathological conferences for residents and, in addition, has presented interesting material at the monthly meetings of the New England Ophthalmological Society. Dr. Frank Milam has been assisting Dr. Smith on a Fellowship from the U. S. Public Health Service.

GROWTH OF THE EYE BANK

Mrs. W. A. Slade, Jr., Executive Secretary of the Boston Eye Bank, reports greatly increased activity during the past year. We received 114 eyes, compared to 78 for the same period last year. Of these, 45 were used for corneal transplantation and 71 for research purposes. 816 new donor forms were signed and returned and the number of affiliated hospitals has risen from 61 to 68.

Our film, "Eyes of Service," continued to be in great demand. Added to the usual yearly television publicity, we had notices in five hundred MTA cars for three months this summer. This was paid for by the Boston Lions Clubs.

Mrs. Richard Cary Curtis established a memorial fund of $2,000 for the late Mr. Curtis. Another benefactor was Mr. John R. Coffee, who established a memorial fund for his late mother, Mrs. Agnes L. Coffee. The Junior League of Boston is no longer allied with the Eye Bank, as they have taken on another project. I would like to take this opportunity again to express to the League our appreciation for the generous financial support given to the Eye Bank during its early years. Indeed, without this continuing aid, it is doubtful that it could have survived.

NEW GLAUCOMA CONSULTATION SERVICE

One of the most significant forward steps has been the establishment of the Glaucoma Consultation Service. With the development of tonography, a technique for measuring the outflow of aqueous humor from the anterior chamber of the eye, the Howe Laboratory, a few years ago, began to study all clinic patients with glaucoma as part of their glaucoma research program. After valuable information had been obtained, correlating the clinical and experimental findings, it seemed that tonography in the future should be properly a hospital service function rather than a laboratory one. Consequently, some shifting of space in the clinic area was accomplished and this new service established, with Dr. Robert Trotter in charge.

All clinic patients with glaucoma are referred to this Service for special study by tonography and gonioscopy and the patient is then returned to the referring service with evaluation. Private patients are also referred by members of the staff. Each ophthalmic resident spends three months on this new service, which gives him an opportunity to do some clinical research in glaucoma. Dr. Baruch Sachs, the first resident assigned here, has been investigating the effect on the intraocular pressure of cyclogyl, a new mydriatic drug.

RESEARCH ACTIVITIES

It is sometimes hard to draw the line between clinical and basic research as the two are often closely integrated. An example of this is the investigation of glaucoma by the Howe Laboratory group mentioned above. Having determined, by tonographic measurements on glaucoma patients, that the elevated intraocular pressure is due to obstruction of outflow rather than hyper-secretion, a study of the exact location of the obstruction and the causes for it was undertaken by Dr. Morton Grant, using living animal eyes and freshly enucleated human eyes supplied by the Boston Eye Bank. It was found that the obstruction to outflow observed in vivo persists after enucleation when all nervous and circulatory controls have been eliminated, thereby suggesting some stable anatomical structure in the region of the canal is responsible. Further studies are in progress to pinpoint the exact location of this structure.

HOWE LABORATORY INVESTIGATIONS

A report of this and other basic research in the Howe Laboratory, under Dr. Cogan's leadership, will be found in their separate annual report and only brief mention will be made here of some of their work. One of their major accomplishments has been further study on the experimental production of fat by corneal cells, which was originally demonstrated in this laboratory a few years ago. Apparently the fat formation in non-fatty tissue depends upon the presence of certain unsaturated fatty acids, plus a certain co-factor in the blood serum. Attempts are being made to identify the responsible co-factor. In connection with this, other studies are being made on the effect of gamma irradiation on fat formation and the formation of fat in corneal transplants.

Another interesting study has been that of the glucose metabolism of the lens, which is different from other tissues of the body. The possibility that cataract formation may be associated in some way with this peculiar type of metabolism is being explored. A study of the turn-over rates of the lens proteins is being continued by use of electrophoresis and chromatography. Studies are continuing on the mechanisms of corneal injury by chemicals, particularly the role played by the corneal mucoproteins. It was found that some of the toxic metals, which become strongly bound in the cornea, greatly reduce the extractability of these mucoproteins. In certain cases the injury to the cornea may be reversed by appropriate treatment. The development of a new fundus camera has been completed by Dr. David D. Donaldson which, it is believed, will overcome some of the disadvantages of present cameras.

RESEARCH AT THE RETINA FOUNDATION

The research activities of the Retina Foundation, of which Dr. Charles L. Schepens is the Director, are reported in detail in their separate yearly report, so only brief mention of them will be made here. Dr. Endre Balazs has continued his interesting studies on the hyaluronic acid content of the vitreous body, using the radioisotope C14. Along with Dr. Gordon Brownell, he has set up a recently developed special apparatus to determine radioactive carbon dioxide in the gas phase, a method which has been shown to be 100 times more sensitive than the usual methods of determination. By this means, the rate of formation of hyaluronic acid in the vitreous and cornea can be studied by giving to an animal a radioactive carbon labelled compound, which incorporates in the hyaluronic acid molecule.

Dr. Balazs has pursued his work with the mucopolysaccharides, with particular reference to their effect on fibroblasts in vitro. Certain polysaccharides inhibit the mitosis of fibroblasts. It was found that this could be counteracted by increasing the calcium concentration of the culture media. Other studies on the vitreous have been made by Dr. Arthur Howe and Dr. Lazlo Varga. Dr. Howe has found that if cattle vitreous is exposed to irradiation by either ultra-violet light, x-rays or electrons, the gel state is destroyed and liquefaction occurs. The ascorbic acid and hyaluronic acid components of the vitreous are more sensitive than the proteins, which are only affected by much larger doses. An investigation is now underway to determine the effect of total body radiation on the vitreous.

Dr. Varga has concentrated on the study of the mechanical properties of the vitreous gel. By specially designed instruments, constructed in the machine shop of the Retina Foundation, the visco-elastic properties of gels have been investigated with particular reference to the rearrangement of collagen filaments after mechanical stress. Studies on the fine structure of the cornea and sclera have been continued by Dr. Marie Jakus. The scleral collagen fibers have been found to have a wide range of fibril diameters, whereas the corneal collagen fibers are mostly uniform. Dr. Jakus has studied the embryogenesis of the cornea in the chick embryo and has learned much about the formation of the different layers. She is now working with amphibian embryos. A chemical investigation of Descemet's membrane, obtained from cattle eyes, was made by Dr. Balazs and Dr. Dohlman. They found that it contained about 73% collagen and the remainder consisted mostly of a glucoprotein.

Dr. William Stone's investigative work with plastics and prosthetics has dealt chiefly with the development of the plastic artificial cornea. This work has had the support of the Air Force, the Navy, and the Hyams Fund. Although thin plastic discs can now be maintained between two lays of the rabbit cornea, the problem has been to maintain an optical opening in the corneal tissue above and below the plastic. A method has been developed which seems to accomplish this rather consistently in the rabbit. It is now planned to work with monkeys and eventually in certain human eyes if the method becomes developed to a safe degree. A surgical operating slit lamp has been obtained from Germany which will make it possible to do this delicate corneal surgery under much higher magnification.

Further developments have been made in the partially buried post-enucleation implant and a now completely buried implant has been developed. During the year, 116 plastic artificial eyes have been made in this laboratory for clinic and private patients. Other experimental work consists in the development of tantalum and polyethylene tubes of various designs to drain aqueous from the anterior chamber in rabbit and monkey eyes. Also, the eyes in which silicon plastic was used to replace vitreous three years ago are now ready for removal and histologic study.

RETROLENTAL FIBROPLASIA FOLLOW-UP

Dr. Leona Zacharias and Dr. Julian Chisholm, Jr., are at present engaged in a five-year follow-up study of mild and severe retrolental fibroplasia, in an attempt to evaluate the degree of ocular and visual damage which results from each stage of the disease. This phase of the work is supported by a five-year grant from the U. S. Public Health Service. Experimental animal studies are planned for further investigation of the causation of RLF. An attempt will be made to examine the mechanism whereby excess oxygen gives rise to RLF and also to consider causative factors other than oxygen. The experimental work is being supported by grants from the Foundation for Vision and the National Foundation for Eye Research.

In the Bacteriological Laboratory, Miss Anita B. Mangiaracine and Dr. Henry F. Allen have continued testing procedures for sterilization of instruments and other materials in cooperation with Mr. John Murphy, Pharmacist-in-Chief. The packaging of sharp instruments for dry sterilization has been worked out and will be instituted as soon as the new dry heat sterilizer is in operation in the Eye Operating Room. Solutions claimed to have sporicidal properties are being tested as they appear.

Dr. Edwin B. Dunphy has continued his investigations of the radioisotopes in the detection of ocular tumors. In this, he has had the collaboration of Dr. Joseph Dowling, Dr. Alfred Scott, and Dr. William Sweet.

EDWIN B. DUNPHY, M.D.,
Chief of Ophthalmology

Department of Otolaryngology

ONE of the most important steps taken in the last year in the Department of Otolaryngology is best understood by looking back and reviewing the whole course of this service at the Infirmary, right from the beginning.

EARLY DEVELOPMENT

As the science of medicine developed, it was natural that pioneers with searching and inquisitive minds should become interested in certain organs of the body and their functions. Diseases of the eye first attracted the attention of these pioneers and the science of ophthalmology was born. General surgeons began, also, to show an interest in the diseases of the ear and of the mastoid process, and through this interest the specialty of otology came into being.

When the Massachusetts Eye and Ear Infirmary was chartered in 1827, otology and ophthalmology were the only two recognized specialties. In 1854, Manuel Garcia bent a dental mirror and, with sunlight, saw, for the first time, a human larynx. Visualization of the larynx stimulated interest in the diseases of the larynx and laryngology developed as a department of medicine.

At this time, appointments of the staff of the Infirmary were made either to the Department of Otology or to the Department of Ophthalmology. Those interested in laryngology and rhinology received their staff appointments from the Massachusetts General Hospital.

From the annual reports of past years, we learn that:

In 1922: "The Laryngological Department of the Massachusetts General Hospital was granted the use of beds in the Massachusetts Eye and Ear Infirmary and became a department of that institution as far as its housekeeping was concerned."

In 1925: "The surgeons of the Aural and Laryngological Department appear in one group as Otolaryngologists."

January 1, 1928: "The laryngological Out-Patient Department of the Massachusetts General Hospital was taken over by the Massachusetts Eye and Ear Infirmary and the relations of the Aural Department to the Laryngological Department became very close. At the same time, the Out-Patient Department, though still operated by the Massachusetts Eye and

Ear Infirmary, was joined to that of the Massachusetts General Hospital in the new building, built by the latter."

In the 1947 Annual Report: "The outstanding change in the past year has been the remodelling and consolidation of the Ear, Nose and Throat Clinics as the continued separation was a relic of the development of the specialties of otology and laryngology, and their consolidation has been long overdue."

In our affiliation with the Harvard Medical School from 1888 to 1926, there had been two professors, one of Otology and the other of Laryngology, each one chief of his respective service at the Infirmary. In 1926, Dr. Harris P. Mosher, who held the position of Professor in Laryngology, was also given the position of Professor in Otology, thus for the first time uniting the two departments.

Experience has shown that one specialty cannot be isolated from the other since many ear conditions are influenced by conditions of the nose and throat. With the advent of the antibiotics, suppurative diseases of the ear have been largely controlled so that the service on the otology ward has been relatively lighter in recent years.

FINAL CONSOLIDATION THIS YEAR

On July 1, 1955, the artificial separation of diseases of otology from those of laryngology was terminated at the Infirmary by consolidating the two services. This step, long overdue, was accomplished by the foresight of our Board of Managers in accepting the recommendation that our resident staff be increased from nine to twelve men.

This reorganization permits the establishment of two equal services under two separate chief surgeons, each with his residents. Patients coming to the hospital with diseases of the ear, nose, or throat are admitted to either service in rotation. The change has also helped redistribute the work load more evenly since, previously, the nose and throat service was greatly overworked, due to the development of major surgery of the head and neck. The increased length of training of the residents has also resulted in better patient care.

RESIDENT TRAINING

Also on July 1, 1955, a new system of appointing residents was instituted. In former years a new resident was accepted every four months. Since graduation from medical schools is usually in June, most internships started as of July 1. By the former system of accepting residents, many men were forced to wait as long as a year before commencing their training in Otolaryngology. Now by appointing four new residents on July 1 of each year, this waiting period has been eliminated.

We have also recognized that instruction in the basic sciences should be an integral part of the training program. Three afternoons each week during the first year are, therefore, devoted to study of the basic sciences in the Department of Otology and Laryngology of the Harvard Medical School.

In order to obtain better training in pediatric otolaryngology, arrangements have been completed with the Department of Otolaryngology of the Children's Medical Center to rotate our residents through this service for a period of three months. Both institutions will benefit from this arrangement, our residents in their training and the Children's Hospital in obtaining approval as an affiliate in an otolaryngological residency.

As part of this reorganization of the education of residents, the Board of Managers further approved the appointment of Dr. William W. Montgomery to a full-time position as Chief Resident. His duties include supervising the Ear, Nose and Throat Clinic and assisting in the teaching of the basic sciences.

The statistical studies of the Clinics reveal that the Ear, Nose and Throat Clinic has shown growth over previous years both in the number of new cases and in the number of repeat visits. This growth, we strongly believe, is a result of better patient care.

RESEARCH AND OTHER STAFF ACTIVITIES

The research activities of the Department of Otolaryngology have been reported in considerable detail in the recent Infirmary brochure entitled: "Research and the Massachusetts Eye and Ear Infirmary," and hence will not be included in this report.

The new laboratory facilities, which are just being completed, will serve as an impetus to more and better research in the unsolved problems which confront us.

The members of our Staff continue to be in demand as guest lecturers of seminars and for local, national and international medical society meetings. The Infirmary can well be proud of the high regard enjoyed by the members of the Staff in the field of Otolaryngology.

LeRoy A. Schall, M.D.
Chief of Otolaryngology

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*Original author in capitals

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Directory

MEMBERS OF INFIRMARY STAFF, ALUMNI AND RESIDENTS

Names of members of the Infirmary Staff are printed in capital letters.

Abbreviations following the name indicate to what service of the Infirmary the individual belongs:

Oph.; Ophthalmology
Otolar.; Otolaryngology
Bron.; Bronchoscopy
Esoph.; Esophagoscopy

Letters in small type preceding the abbreviations indicate the special work of the individual:

a; assistant
an.; anesthetist
assoc.; associate
c.; chief of service
cons.; consulting
dir.; director
exec. a.; executive assistant
fel. res.; fellow in research
grad.; graduate
path.; pathologist
r.; resident
roent.; roentgenologist
s.; surgeon
s.p.o.; surgeon for plastic operations
s.t.c.; surgeon assigned to Tumor Clinic

As of March, 1956

Adams, Samuel T., Oph. 1951
1610 Pine Ave., W. Montreal, Que., Canada

Albaugh, Clarence H., Oph. 1940
727 W. 7th, Los Angeles, Cal.

Alexander, Seeyman L., Aural 1919
170 St. George, Toronto, Ont., Canada

ALLEN, HENRY F., (a. Oph.), Oph. 1949
200 Beacon, Boston, Mass.

Allen, John H., Aural 1904
32 Deering, Portland, Me.

ALLMAN, CHARLES H., (s. Otolar.), Otolar. 1930
520 Commonwealth Ave., Boston, Mass.

ALPERT, D. ROBERT, (a. Oph.)
41 Bay State Rd., Boston, Mass.

Angelini, Hugo D., Otolar. 1951
3 Seaward Avenue, Wellesley Hills, Mass.

Anthony, Alan R., Oph. 1936
736 Granville, Vancouver, B. C., Canada

Anthony, Marc, Oph. 1929
508 Old Nat'l Bank Bldg., Spokane, Wash.

Ayash, John J., Otolar. 1946
119A Main St. South, Minot, N. D.

Bahn, Gustave C., Oph. 1948
932 Maison Blanche Bldg., New Orleans, La.

Blair, Hugo L., Oph. 1932
102-110 Seemd Ave., S.W. Rochester, Minn.

Ballenger, John J., Otolar. 1943
806 Park Ave., Wilmette, Ill.

Barton, Richard T., Otolar. 1945
9754 Wilshire Blvd., Beverly Hills, Cal.

Bassen, Edward J., Oph. 1928
70 E. 66th, N. Y. C.

Bauer, Frederick, Aural 1902

BECHTEL, EDWARD J. (r. Oph.)

Beck, Peter, Oph. 1954
142 Court, Portsmouth, N. H.

BEETHAM, WILLIAM P., (s. Oph.), Oph. 1929
108 Bay State Rd., Boston, Mass.

Birdsall, Clarence H., Aural 1916, Oph. 1918
26 Summer, Haverhill, Mass.

Black, Daniel E., Otolar. 1944
174 Main, Nashua, N. H.

Bobbett, Gordon H., Otolar. 1948
161 W. Cheves, Florence, S. C.

BOGAN, FREDERICK L., (cons. s. Otolar.),
Aural 1908
249 River, Milton, Mass.

Boies, Lawrence R., Otolar. 1931
1937 Medical Arts Bldg., Minneapolis, Minn.

BRACONIER, HARRY E., (a. s. Oph.), Oph. 1945
1180 Beacon, Boston, Mass.

Brady, Frank W., Otolar. 1942
8 Merrimac, Lowell, Mass.

BRANCO, ADOLPHO (r. Otolar.)

Brawner, Leon E., Otolar. 1925

BREED, FREDERIC B., (a. Oph.), Oph. 1950
2 Winter, Salem, Mass.

Brewer, David W., Otolar. 1948
1100 E. Genessee, Syracuse, N. Y.

BROCKHURST, ROBERT J. (a. Oph.), Oph. 1951
62 Basset, Lynn, Mass.

BROWN, JESSE F., (c. an.)
243 Charles, Boston, Mass.

Brown, Lester A., Jr., Otolar. 1937
478 Peachtree, Atlanta, Ga.

Bryan, Burton D., Otolar. 1943
151 Rock, Fall River, Mass.

BULLINGTON, S. JAMES, (a. Oph.), Oph. 1956
1180 Beacon, Brookline, Mass.

Burke, J. Robert, Oph. 1918, Aural 1919, Retired
465 Eighth Avenue, N.E., St. Petersburg, Fla.

Cameron, Walter C., Oph. 1930
1103 Medical Arts Bldg., Tacoma, Wash.

Candray, Carlos H., Oph. 1944
San Salvador, El Salvador, C. A.

Caron, Armand L., Otolar. 1927
Medical Arts Bldg., Worcester, Mass.

Carroll, Frank D., Oph. 1935
635 W. 165th St., N. Y. C.

CARROLL, WALTER J. E., (s. Otolar.)
5 Chestnut, Arlington, Mass.

Carter, Leland E., Oph. 1926
613-617 David Whitney Blvd., Detroit, Mich.

Case, Paul H., Oph. 1938
550 W. Thomas Rd., Phoenix, Ariz.

CASTEN, VIRGIL G., (s. Oph.), Oph. 1931
412 Beacon, Boston, Mass.

CAVANAUGH, THOMAS, (a. s. Oph.), Oph. 1940
395 Commonwealth Ave., Boston, Mass.

Cave, Linus S., Otolar. 1927
129 W. Borden Ave., Syracuse, N. Y.

CERRATO, CALVIN M., (a. s. Otolar.),
Otolar. 1944
15 Bay State Rd., Boston, Mass.

Chamberlain, Calvin B., Oph. 1944
342 Investment Bldg., Pomona, Cal.

CHANDLER, PAUL A., (s. Oph.), Oph. 1925
5 Bay State Rd., Boston, Mass.

CHAPMAN, RICHARD B. (a. Oph.) 1955
743 High, Dedham, Mass.

CHISHOLM, JULIAN F., JR., (a. Oph.)
34½ Beacon, Boston, Mass.

Clarke, Samuel T., Oph. 1939
505 Medico-Dental Bldg., Reno, Nev.

CLOUGH, JOSEPH M., (a. s. Oph.), Otolar. 1939,
Oph. 1941
101 Bay State Rd., Boston, Mass.

COGAN, DAVID G., (s. Oph.), Oph. 1935
Dir. Howe Lab., Dir. path. lab.
243 Charles, Boston, Mass.

Cogan, James R., Oph. 1944
414 North Camden Dr., Beverly Hills, Cal.

COLLINSON, A. WILLIAM, (a. s. Oph.)
8 Parter St., Melrose, Mass.

Converse, John M., Otolar. 1938
722 Park Ave., N. Y. C.

Cooper, Kemp G., Otolar. 1940
1516 Cook, Denver, Colo.

Cordray, David P., Otolar. 1940
Dirigo Medical Clinic, Western Ave., Augusta, Me.

COVITZ, EDWARD E., (a. s. Oph.)
475 Commonwealth Ave., Boston, Mass.

Coyle, John A., Oph. 1931
Norwich, Vt.

Crewson, Arthur L., Otolar. 1927
132 Second, W. Cornwall, Ont., Canada

CRONIN, THOMAS P., (a. Oph.), Oph. 1950
94 Pleasant, Arlington, Mass.

Davidson, Herman P., Oph. 1920
30 No. Michigan Ave., Chicago, Ill.

Day, Kenneth, Otolar. 1924
121 University Pl., Pittsburgh, Pa.

Dean, Abbott W., Oph. 1929
424 Oakland Ave., Council Bluffs, Iowa

DE BLOIS, ELIZABETH, (a. s. Otolar.)
247 Commonwealth Ave., Boston, Mass.

DEVINE, MRS. ETHEL M., R.N. (exec. a.),
M.E.&E.I.

Dietrich, Herbert J., Otolar. 1951
2035 Delancey, Philadelphia, Pa.

DONAHUE, HUGH C., (Assoc. s. Oph.), Oph. 1931
520 Commonwealth Ave., Boston, Mass.

DONALDSON, DAVID D., Oph. 1953
Howe Lab., 243 Charles, Boston, Mass.

Donoghue, William F., Otolar. 1942, Oph. 1944
69 Chestnut, Springfield, Mass.

Dowling, Joseph L., Oph. 1918
57 Jackson, Providence, R. I.

DOWLING, JOSEPH L., JR., (r. Oph.)

DOYLE, SAMUEL C., (r. Otolar.)

DREISLER, KNUD K., (a. Oph.)
740 Main, Waltham, Mass.

DROOKER, J. CHARLES (assoc. s. Otolar.), Otolar. 1939
285 Commonwealth Ave., Boston, Mass.

Drury, Dana W., Aural 1906
483 Beacon, Boston, Mass.

Duclos, Gaston N., Otolar. 1943, Oph. 1945
1538 Sherbrooke, W. Montreal, Que., Canada

DUNPHY, EDWIN B., (c. Oph.), Oph. 1923
243 Charles, Boston, Mass.

EASTON, MAHLON T., (assoc. s. Oph.), Oph. 1936
1180 Beacon, Boston, Mass.

ERNLUND, CARL H., (s.t.c.), Otolar. 1927
5 Bay State Rd., Boston, Mass.

EVANS, MAURICE G., (s. Otolar.), Otolar. 1928
416 Marlborough, Boston, Mass.

Evans, William H., Oph. 1924
510 Dollar Bank Bldg., Youngstown, Ohio

Farrell, James I., Oph. 1932
301 Kempf Bldg., Utica, N. Y.

FINK, ROBERT J., (Oph.) 1955
5408 York Ave. South, Minneapolis, Minn.

Filmer, George A., Oph. 1939
610 Metropolitan Bldg., Denver, Colo.

Fisher, Stanwood E., Aural 1909
338 Spring, Portland, Me.

Floyd, Paul E., Oph. 1946
2 Middle, Farmington, Me.

Foote, Charles M., Oph. 1940
412 No. Hastings Ave., Hastings, Neb.

Frackleton, Ralph J., Otolar. 1933
15701 Detroit Ave., Lakewood, Ohio

FRAME, STUART M., (r. Otolar.)

Franklin, C. Ray, Oph. 1931
10 E. 90th, N. Y. C.

FRAZEE, JOHN R., (assoc. s. Otolar.), Otolar. 1925
1180 Beacon, Boston, Mass.

FRED, GUSTAVE, (cons. s. Otolar.), Otolar. 1925
520 Beacon, Boston, Mass.

FREESE, CARL G. (r. Oph.)

Fultz, William E., Oph. 1927
Glace Bay, N. S., Canada

Gabriels, Joseph A. D., Oph. 1921
346 State, Albany, N. Y.

Gaudreau, Honore E., Oph. 1930
293 Bridge, Springfield, Mass.

Germain, Harry H., Oph. 1899
479 Commonwealth Ave., Boston, Mass.

Gifford, Harold, Jr., Oph. 1934
1620 Medical Arts Bldg., Omaha, Neb.

Gilbert, John J., Oph. 1917, Aural 1920
209 Angell, Providence, R. I.

Giller, Herbert, Oph. 1952
1575 East Olive, Milwaukee, Wis.

Gillespie, Elmer H., Otolar. 1932

Ginsberg, Joseph, Oph. 1953
881 Lexington Ave., Cincinnati, Ohio

Goduti, Richard J., Oph. 1946
704 Congress, Portland, Me.

GOHD, ROBERT S., (res. vir.)
243 Charles, Boston, Mass.

Goldcamp, Richard R., Otolar. 1948
810 DoMare Bank Bldg., Youngstown, Ohio

Goldman, A. Milton, Oph. 1924
Rockville Centre, N. Y.

GOODALE, JOSEPH L., (cons. s. Otolar.)
Ipswich, Mass.

GOODALE, ROBERT L., (cons. s. Otolar.) 1926
330 Dartmouth, Boston, Mass.

GOODALL, EDWIN B., (a. Oph.), Oph. 1952
328 Washington, Wellesley Hills, Mass.

GOODELL, WILLIAM, Aural 1906
Halladay Ave., Suffield, Conn.

GRANT, W. MORTON, (a. s. Oph.)
Howe Lab., 243 Charles, Boston, Mass.

GRAY, GERALD H., Otolar. 1929
418 Thirtieth, Oakland, Cal.

GRIFFEY, LOUIS D., (r. Otolar.)

GUIMARAES, JOAO C., Otolar. 1946
Rua David Campista 67, Botafogo, Rio, Brazil, S. A.

GUNDERSEN, TRYGVE, (s. Oph.), Oph. 1930
101 Bay State Rd., Boston, Mass.

HACKING, RAYMOND F., Oph. 1927
105 Waterman, Providence, R. I.

HAIRE, PAUL G., (a. s. Oph.)
585 Main, Malden, Mass.

HAKIM, ARCADIUS, Otolar. 1954
Peter Bent Brigham Hospital, 721 Huntington Ave., Boston, Mass.

HALEY, WARREN D., (a. Oph.), Oph. 1950
78 Church, Winchester, Mass.

HALTON, EDWARD J., Otolar. 1942
337 Appleton, Holyoke, Mass.

HAPP, LINLEY C., (a. Oph.), Otolar. 1931, Oph. 1943
170 Waterman, Providence, R. I.

HEATH, PARKER, (cons. s. Path.)
Sullivan Harbor, Me.

HEFFERNAN, DAVID A., Oph. 1904
270 Commonwealth Ave., Boston, Mass.

HEINE, LYMAN H., Otolar. 1927
1535 N. Broad, Freemont, Neb.

HEINICKE, HORST J., Otolar. 1948
116 W. Buffalo, Ithaca, N. Y.

HENNESSEY, WILLIAM W., Aural 1908
33 Essex, Salem, Mass.

HERM, ROBERT J., (a. Oph.) 1955
314 Main, Melrose, Mass.

HERMAN, EDWARDS W., (cons. s. Otolar.)
Lincoln, Mass.

HILL, FRANCIS S., (Dir., M.E.&E.I.)
243 Charles, Boston, Mass.

HILL, FREDERICK T., Aural 1916
111 Main, Waterville, Me.

HILL, JOHN M., (a. Oph.)
108 Bay State Rd., Boston, Mass.

HIRSCH, LAWRENCE S., (a. Otolar.)
42 Lincoln, Framingham, Mass.

HO, ALBERT K. T., Otolar. 1949
Central Medical Bldg., Beretania & Kalakaua, Honolulu, T. H.

HOBART, CARL, Oph. 1922
5601a Devonshire Ave., St. Louis, Mo.

HOLLABAUGH, CHARLES F., Oph. 1932
1915 Church, Nashville, Tenn.

HOLMES, EDGAR M., (s.p.o. Otolar.), Otolar. 1934
330 Dartmouth, Boston, Mass.

HOLT, LAWRENCE B., Oph. 1948
208-209 Reynolds Bldg., Winston-Salem, N. C.

HOOPLE, GORDON D., Otolar. 1926
1100 E. Genessee, Syracuse, N. Y.

HOUSTON, G. GILBERT, Otolar. 1938
10 West, Charlottetown, P.E.I., Canada

HURST, ALFRED P., (r. Otolar.)
(Military leave of absence)

HUTCHINSON, RUTH M., R.N. (exec. a.) M.E.&E.I.

IRELAND, PERCY E., Otolar. 1935
170 St. George, Toronto, Ont., Canada

IRGENS, EDWIN R., Otolar. 1938
11 Peoples State Bank Bldg.
St. Joseph, Mich.

IRVINE, A. RAY, JR., Oph. 1947
9730 Wilshire Blvd., Beverly Hills, Cal.

IRVINE, S. RODMAN, Oph. 1935
700 Roosevelt Bldg., Los Angeles, Cal.

IRVINE, WENDELL, Oph. 1941
2010 Wilshire Blvd., Los Angeles, Cal.

JACOBS, DENHOLM M., (Assoc. Dir. M.E.&E.I.)
243 Charles, Boston, Mass.

JESBERG, NORMAN, Otolar. 1947
Eye & Ear Hospital, 500 S. Lucas Ave.,
Los Angeles, Cal.

JEWETT, EVERETT P., Oph. 1945
65 Elm, Worcester, Mass.

JOHNSON, CHARLES I., (cons. s. Otolar.), Otolar. 1929
375 Heath, Chestnut Hill, Mass.

JOHNSON, DAVID S., Oph. 1956
208 David Whitney Bldg.
Detroit, Michigan

JOHNSON, LORAND V., Oph. 1937
School of Medicine, Western Reserve U.
Cleveland, Ohio

JONES, EDWARD E., Otolar. 1928
141 Elm Street, Brockton, Mass.

JUDD, DELBERT K., Otolar. 1934
423 Arcade Bldg., Kankakee, Ill.

KANT, ALFRED, Oph. 1948
620 Woolworth Bldg., Watertown, N. Y.

KAZANJIAN, KENNETH A., (a. s. Otolar.)
475 Commonwealth Ave., Boston, Mass.

KAZANJIAN, VARAZTAD H., (cons. s.p.o.)
475 Commonwealth Ave., Boston, Mass.

KEARNY, RICHARD A., Aural & Lar., 1921
2311 Conn. Ave., Washington, D. C.

KELEMEN, GEORGE, (res. assoc.)
20 Gloucester, Boston, Mass.

KELLEY, VINCENT J., (s. Otolar.)
520 Commonwealth Ave., Boston, Mass.

KENNEALLEY, ELMER V., Oph. 1952
479 Main, Greenfield, Mass.

KENNEDY, MICHAEL F., Oph. 1927
805 Columbia Medical Bldg., Wash., D. C.

KENT, CHARLES, (a. s. Otolar.)
270 Commonwealth Ave., Boston

KERST, J. ARTHUR, (Oph.) 1934
1211 S. 6th, Springfield, Ill.

KING, DAVID G., Otolar. 1951
605 Commonwealth Ave., Boston, Mass.

KING, MERRILL J., SR., (cons. s. Oph.), 1932
22 White, Rockland, Me.

KING, MERRILL J., JR., (r. Oph.)

KOS, CLAIRE M., Otolar. 1941
University Hospital, Iowa City, Iowa

LANE, CHARLES S., Otolar. 1949
1214 North B., Fort Smith, Ark.

LANGWORTHY, HENRY G., Aural 1907
394 W. 10th, Dubuque, Iowa

LAPIERRE, WARREN W., Oph. 1948
32 Clinton Ave., Norwichtown, Conn.

LAVOIE, ROLAND, JR., Otolar. 1950
3 Claire Fontaine, Quebec City, Que., Canada

LAWLOR, EDWARD F., (a. s. Otolar.),
Otolar. 1941
67 Vernon, Waltham, Mass.

LEAHEY, BRENDAN D., (s. Oph.), Oph. 1933
9 Central, Lowell, Mass.

LEAVELLE, ROBERT B., Oph. 1953
4747 Vineland Ave., N. Hollywood, Cal.

LECONTE, CHARLES M., Otolar. 1947
Rue Royale, Cap-Haitien, Haiti

LEMOINE, ALBERT N., Oph. 1923
411 Nichols Rd., Country Club Plaza
Kansas City, Mo.

LEMOINE, ALBERT N., JR.
411 Nichols Rd., Country Club Plaza
Kansas City, Mo.

LENTINE, JOSEPH, (assoc. s. Otolar.),
Otolar. 1935
15 Bay State Rd., Boston, Mass.

LEVITT, JESSE M., Oph. 1933
515 Ocean Ave., Brooklyn, N. Y.

LEWIS, DONALD K., (assoc. s. Otolar.),
Otolar. 1943
15 Dix, Winchester, Mass.

LIEBMAN, SUMNER D., (a. s. Oph.), Oph. 1943
115 Bay State Rd., Boston, Mass.

LILLY, JOHN S., Otolar. 1951
21 So. Franklin, Richwood, Ohio

LINCOFF, WILLIAM, Oph. 1954
302 E. 9th, Chester, Pa.

LINEBACK, MERRILL I., Otolar. 1952
28 Eighth, N.E., Atlanta, Ga.

LODGE, EDMUND A., Otolar. 1924
27 Pleasant, Gloucester, Mass.

LO-PRESTI, JOSEPH J., (a. Oph.)
34½ Beacon, Boston, Mass.

LORING, ROBERT G., Oph. 1900, Retired

LOTHROP, OLIVER A., Aural 1911
101 Beacon, Boston, Mass.

LOUGEE, JOHN L., Aural 1909
195 St. Paul, Brookline, Mass.

LOVELY, DAVID K., Otolar. 1946
73 Deering, Portland, Me.

LOVESEY, BURTON E., (assoc. s. Otolar.),
Otolar. 1935
116 Rockland, Natick, Mass.

LURIE, MOSES H., (cons. s. Otolar.),
Dir. Otolar. Res.
483 Beacon, Boston, Mass.

LYNCH, MERCER G., Otolar. 1936
1567 Exposition Blvd., New Orleans, La.

MACDONALD, ALEXANDER E., Oph. 1923
421 Medical Arts Bldg., Toronto, Ont., Canada

MACDONALD, DONALD H., Otolar. 1930

MACHAMER, R. WENNER, Otolar. 1945
18428 Scottsdale Blvd., Cleveland, Ohio

MACKENZIE, ROLAND C., Oph. 1911
30 Grant, Waltham, Mass.

MACLAUGHLIN, CHARLES H., (a. s. Oph.),
Oph. 1947
834 Broadway, Everett, Mass.

MACMILLAN, ALEXANDER S., (roent.)
483 Beacon, Boston, Mass.

MACMILLAN, ANDREW L., JR., Aural 1912
46 Pleasant, Concord, N. H.

MACNIE, JOHN P., Oph. 1929
635 W. 165th, N. Y. C.

MALKOFF, JACK, Otolar. 1955
2257 Coronad Ave., Youngstown, Ohio

MANCALL, IRWIN T., (a. Oph.), Oph. 1952
750 Main, Hartford, Conn.

MANGIARACINE, ANITA, (bact.)
243 Charles, Boston, Mass.

MANSUR, LEON WALLACE, Oph. 1898, Retired
Valley Center, Cal.

MARTIN, S. FORREST, (a. s. Oph.), Oph. 1938
165 Bay State Rd., Boston, Mass.

MARTINEZ, DANIEL E. M., Otolar. 1953
Scott & White Clinic, Temple, Tex.

MATTIS, ROBERT DEAN, Oph. 1942
634 N. Grand Blvd., St. Louis, Mo.

MCCABE, FRANK J., Oph. 1916
204 Angell, Providence, R. I.

MCCALL, ROBERT E., Otolar. 1938
236 So. Main, Marion, N. C.

MCCLINTOCK, WALTER L., Otolar. 1938

MCENEANEY, JOSEPH P., Otolar. 1947
301 Essex, Lawrence, Mass.

MCGUIGAN, G. EDMUND, Oph. 1924
26 W. King, York, Pa.

MCINTIRE, FREDERIC J., Oph. 1910
63 N. Common, Lynn, Mass.

McINTIRE, FREDERIC J., JR., (a. Otolar.)
63 N. Common, Lynn, Mass.

McKEIGUE, JOHN E., (assoc. s. Otolar.),
Otolar. 1949
247 Commonwealth Ave., Boston, Mass.

MCKENZIE, RODNEY J., Otolar. 1942
480 Doctors' Bldg., 19 Garfield Pl., Cincinnati, Ohio

MCLEOD, ANGUS M., Otolar. 1942
Medical Arts Bldg., Toronto, Ont., Canada

MCLEOD, JOHN, Oph. 1930
209 Tower Bldg., 116 W. 47th St., Kansas City, Mo.

MEEK, RAYMOND E., Oph. 1926
729 Park Ave., N. Y. C.

MELTZER, PHILIP E., (s. Otolar.), Aural 1919
Winthrop Foundation
285 Commonwealth Ave., Boston, Mass.

MERRITT, ROBERT E., Oph. 1920, Retired
Valley Center, Cal.

MERTINS, PAUL S., Otolar. 1936
32 Clayton, Montgomery, Ala.

MESSENGER, HARRY K., Oph. 1934
140 Marlborough, Boston, Mass.

MEYER, MONTO F., Oph. 1919
904 Canal Bank Bldg., New Orleans, La.

MILAM, DANIEL F., (a. Oph.) 1955
7 Thorndike Street, Beverly, Mass.

MILES, NATHAN E., Oph. 1937
1031 S. 21st, Birmingham, Ala.

MILLER, DANIEL, (assoc. Otolar.), Otolar. 1943
403 Commonwealth Ave., Boston, Mass.

MILLS, LLOYD, JR., Oph. 1947
609 S. Grand Ave., Los Angeles, Calif.

MONTGOMERY, WILLIAM W. (a. Otolar.) 1955
243 Charles, Boston, Mass.

MOORE, DONALD E., Oph. 1937
417 Medical Arts Bldg., Syracuse, N. Y.

MOORE, EDWARD E., Oph. 1944
Box 476, Marion, Ala.

MOORE, JAMES A., Otolar. 1940
706 Flatiron Bldg., Asheville, N. C.

MOORMAN, JOHN D., Oph. 1939
Times Bldg., Huntsville, Ala.

MORRISSEY, ARTHUR M., (a. Oph.)
24 Rural Ave., Medford, Mass.

MOSHER, HENRY A., (a. s. Oph.), Oph. 1941
71 Bay State Rd., Boston, Mass.

Moteley, Frederick E., Otolar. 1925
Charlotte Eye & Ear Hospital, Charlotte, N. C.

Moulton, Everett C., Jr., Oph. 1948
1214 North B., Fort Smith, Ark.

MUELLER, WERNER, Otolar. 1933
dir. Mosher Lab.
243 Charles, Boston, Mass.

Murphy, William E., Otolar. 1933
Slater Bldg., Worcester, Mass.

Myers, Roscoe W., Oph. 1927
36 Pleasant, Worcester, Mass.

Myers, Stanley A., Otolar. 1937
2218 Market, Youngstown, Ohio

MYSEL, PHILIP, (cons. s. Otolar.)
351 Commonwealth Ave., Boston, Mass.

Naghlas, N. Edward, Otolar. 1951
Latrobe Bldg., Charles & Read, Baltimore, Md.

Navas, Luis, Otolar. 1950
Apartado N. 376, Managua, Nicaragua, C. A.

Nicholson, Harry M., Aural 1913
515 Medical Arts Bldg., Hamilton, Ont., Canada

O'Connell, John D., Oph. 1943
50 Farmington Ave., Hartford, Conn.

O'Connor, Michael John, Aural & Lar. 1923
105 Waterman, Providence, R. I.

OFFENBACH, BERTHA, (a. Oph.)
270 Commonwealth Ave., Boston, Mass.

Ogden, Frederic W., Otolar. 1942
Fayetteville, Ark.

OKAMURA, ICHIRO D., (a. Oph.), Oph. 1952
243 Charles, Boston, Mass.

Olds, Bomar A., Otolar. 1929
124 W. Princeton Ave., College Park, Ga.

OLSEN, HENRIETTA I., R.N., (exec. a.)
M.E.&E.I.

Parker, Harry C., Oph. 1902

PATTERSON, WILLIAM, (r. Otolar.)

PAVLO, IRVING, (a. Oph.)
520 Beacon, Boston, Mass.

PERRETEN, FRANK A., (r. Oph.)

Perone, Piero, (Otolar.) 1955
119 East 74 St., N. Y., N. Y.

Pfister, Raymond L., Otolar. 1952
1298 Herschel Ave., Cincinnati, Ohio

PIPPITT, RICHARD B., (a. Oph.), Oph. 1949
328 Washington, Wellesley Hills, Mass.

PIRQUET, SILVIO, (fel. in Oph.)
243 Charles, Boston, Mass.

POIRIER, GEORGE H., (cons. s. Otolar.)
60 Bay State Rd., Boston, Mass.

POLLEN, ABRAHAM, (a. s. Oph.), Oph. 1944
636 Beacon, Boston, Mass.

Pollock, Frederic J., Otolar. 1935

Poppen, Mayo J., Oph. 1948
6356½ Van Nuys Blvd., Van Nuys, Cal.

Posner, Marvin, Oph. 1952
371 State, Albany, N. Y.

Price, R. Raymond, Oph. 1936
118 Rutledge Ave., Charleston, S. C.

Provost, Adolphe J., Otolar. 1927
1458 Elm, Manchester, N. H.

Prudhon, Charles A., Otolar. 1927
168 Sterling, Watertown, N. Y.

Quevedo, A. Arturo, Oph. 1933
4a Ave., Sur 19, Guatemala City, Guatemala, C. A.

Quevedo, Julio, Otolar. 1941
15 Calle 6 - 59, Guatemala City, Guatemala, C. A.

Ragan, John D., Oph. 1954
736 Granville, Vancouver 2, B. C.

Rambo, J. H. Tom, Otolar. 1948
535 Park Ave., N. Y. C.

Raynes, Alphonse F., Oph., 1923
16 Market Sq., Portsmouth, N. H.

Reagan, Daniel J., Oph. 1943, Otolar. 1944
507 Main, Worcester, Mass.

REED, GEORGE F., (as. Otolar.), Otolar. 1952
243 Charles, Boston, Mass.

REGAN, CHARLES D. J., (a. Oph.), Oph. 1953
520 Commonwealth Ave., Boston, Mass.

Rice, Earle W., Otolar. 1953
390 Main, Worcester, Mass.

Rice, Theodore A., Oph. 1942
390 Main, Worcester, Mass.

RICHARDS, LYMAN G., (cons. s. Otolar.), Otolar. 1924
Medical Department, Massachusetts Institute of Technology, Cambridge, Mass.

RICHARDSON, JOHN R., (s. Bron. & Esoph.), Otolar. 1935
403 Commonwealth Ave., Boston, Mass.

RIEMER, KARL, (a. s. Oph.), Oph. 1943
403 Commonwealth Ave., Boston, Mass.

RIFE, CHARLES J., (r. Oph.)

ROBINSON, MENDELL, (r. Otolar.)

ROGERS, WILLIAM P., R., (a. Otolar.)
264 Beacon, Boston, Mass.

ROOPENIAN, ARAM, (a.s.p.o. Otolar.), 1944
475 Commonwealth Ave., Boston, Mass.

ROTHWELL, STEPHEN C., Otolar. 1925
Nonquitt, Mass.

RUBEN, MAURICE, (a. s. Otolar.)
151 Maple, Springfield, Mass.

RUGGLES, RALPH H., (cons. s. Oph.), Oph. 1920
394 Marlborough, Boston, Mass.

RUNGE, PAUL A., (a. Oph.)
140 Marlborough, Boston, Mass.

SACHS, BARUCH, (r. Oph.)

SACHS, BENJAMIN, (cons. s. Oph.), Oph. 1925
636 Beacon, Boston, Mass.

SADE, JACOB, (r. Otolar.)

SAEED, YUNIS M., Otolar. 1954
Brockton Hospital, Brockton, Mass.

SAINSBURY, AUGUSTUS W., Otolar. 1943
42 N. Main, Canandaigua, N. Y.

SAM, JAMES M., Otolar. 1949
Jones Eye, Ear, Nose & Throat Hospital, Johnson City, Tenn.

SARGENT, FRANCIS B., Aural & Lar., 1923
124 Waterman, Providence, R. I.

SAVAGE, ROSS E., Oph. 1910
Gloucester, Mass.

SCARNEY, HERMAN D., Oph. 1928
573 Fisher Bldg., Detroit, Mich.

SCHALL, LEROY A., (c. Otolar.)
243 Charles, Boston, Mass.

SCHEPENS, CHARLES L., (a. s. Oph., dir. Retina Fd.)
327 Charles, Boston, Mass.

SCHNEBLY, J. THOMAS, Oph. 1936
11134 Georgia Ave., Silver Spring, Md.

SCOTT, ALFRED W. (a. Oph.), 1955
7 Bay State Road, Boston, Mass.

SCOTT, DAVID H., (a. Oph.), Oph. 1949
7 Thorndike, Beverly, Mass.

SEALE, EARL S., (a. s. Oph.), Oph. 1940
126 Bay State Rd., Boston, Mass.

SHAMBAUGH, GEORGE E., JR., Otolar. 1932
55 E. Washington, Chicago, Ill.

SHEA, JOHN J., Otolar. 1953
3259 Overland Pl., Memphis, Tenn.

SHEEHAN, LINUS A., Oph. 1943
210 Angell, Providence, R. I.

SHERMAN, MORRIS, Otolar. 1950
82 W. Commerce, Bridgeton, N. J.

SHLOSSBERG, FRANK R., (a. s. Otolar.)
116 Emerson, Haverhill, Mass.

SKILLING, FRANCIS C., Oph. 1933
442 Ingram Bldg., Miami, Fla.

SLAUGHTER, EARL C., Otolar. 1940
Granada Bldg., Norfolk, Neb.

SLOANE, ALBERT E., (a. s. Oph.)
416 Marlborough, Boston, Mass.

SMITH, HAROLD, Otolar. 1937
1149 N. Garvey Ave., Pomona, Cal.

SMITH, TAYLOR R., (a. Oph.), Oph. 1951
243 Charles, Boston, Mass.

SMITH, WILLIAM L., Oph. 1950
U. S. Naval Hosp., Phil., Pa.

SNOW, ROBERT C., Otolar. 1940
508 E. S. Temple, Salt Lake City, Utah

SPINOLA, EDMUND T. L., Otolar. 1954
Rua Da Graca 19, Bahia, Brazil, S. A.

SPRATT, CHARLES N., Oph. 1904
1231 Medical Arts Bldg., Minneapolis, Minn.

STAPFF, VOLKER H., Otolar. 1952
Av. Uruguay 826, Montevideo, Uruguay, S. A.

STEPHENS, H. FREDERICK, Oph. 1939
195 Thayer, Providence, R. I.

STERNSTEIN, HERMAN J., (assoc. s. Otolar.)
416 Marlborough, Boston, Mass.

STONE, WILLIAM, JR., (a. Oph.), Oph. 1949
1101 Beacon, Boston, Mass.

SUDARSKY, RAYMOND D., (r. Oph.)

SULLIVAN, GARRETT L., (a. s. Oph.), Oph. 1938
101 Bay State Rd., Boston, Mass.

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124 Ocean, Lynn, Mass.

TAYLOR, IRWIN S., (r. Oph.)

Tegelberg, Julius, Otolar. 1931
390 Main, Worcester, Mass.

Thomas, John H., Otolar. 1944, Oph. 1946
262 E. Market, Warren, Ohio

THORLAKSON, NEIL F., (r. Oph.)

Toot, J. Frederick, Oph. 1922
520 First Nat'l Bank Bldg., Canton, Ohio

TROTTER, ROBERT R., (a. Oph.), Oph. 1951
Howe Lab., 243 Charles, Boston, Mass.

Twitchell, Marshall C., Oph. 1941
217 S. Union, Burlington, Vt.

Vail, Derrick T., Oph. 1924
700 N. Michigan Ave., Chicago, Ill.

VERHOEFF, FREDERICK H., (cons. c. Oph.)
395 Commonwealth Ave., Boston, Mass.

Viger, Roland J., Oph. 1937
Medical Bldg., 710 Drummond, Montreal, Que., Canada

WAITE, J. HERBERT, (cons. s. Oph.), Oph. 1923
7 Bay State Rd., Boston, Mass.

WALKER, D. HAROLD, (cons. s. Otolar.), Aural 1902
Peterborough, N. H.

Wattles, F. Merrill, Otolar. 1938
1200 S. Kuhl Ave., Orlando, Fla.

Webster, Franklin R., Oph. 1926
810 State Tower Bldg., Syracuse, N. Y.

WEBSTER, RICHARD C., JR., (a. Otolar.)
1101 Beacon, Boston, Mass.

WEILLE, FRANCIS L., (s. Otolar.), Otolar. 1929
247 Commonwealth Ave., Boston, Mass.

Weisman, Herman J., Otolar. 1944
76 Limerock, Rockland, Me.

WEST, FRANCIS J., (a. s. Oph.), Oph. 1947
1101 Beacon, Boston, Mass.

WHITE, LEON E., (cons. s. Otolar.), Aural & Lar. 1923
15 Bay State Rd., Boston, Mass.

Whitney, Raymond C., Oph. 1922
227 Union, New Bedford, Mass.

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270 Commonwealth Ave., Boston, Mass.

Willis, Harry C., Aural & Lar. 1923
Willis Bldg., Wilson, N. C.

Winkler, Herman A., Otolar. 1926
224 Thayer, Providence, R. I.

Wishart, David E. S., Aural & Lar. 1922
170 St. George, Toronto, Ont., Canada

Woodard, M. Wayne, Oph. 1950
517-519 Flat Iron Bldg., Asheville, N. C.

WOODWARD, ARTHUR, (r. Otolar.)

Wright, Clarence F., Otolar. 1931
Weston, Ont., Canada

Wright, Edward N., Otolar. 1933
106 Med. Arts Bldg., Port Arthur, Ont., Canada

ZACHARIAS, LEONA, (fel. in Oph.)
243 Charles, Boston, Mass.

Zanek, Otto L., Oph. 1946
1704 Espercon Bldg., Houston, Tex.

ZAVALIA, JULIO U., (r. Otolar.)

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ZONDERMAN, BERNARD, (a. s. Otolar.), Otolar. 1946
285 Commonwealth Ave., Boston, Mass.

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In Memoriam

PETER HUNTER THOMPSON, M.D.

Consulting Surgeon in Ophthalmology

1903 — Clinical Assistant in Ophthalmology

1909 — Junior Assistant Surgeon in Ophthalmology

1912 — Assistant in Ophthalmology

1914 — Surgeon in Ophthalmology

1925 — Consulting Surgeon in Ophthalmology

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Massachusetts Eye and Ear Infirmary

ONE HUNDRED and THIRTIETH

ANNUAL REPORT

REPORTS FOR 1956

STAFF AND OFFICERS FOR 1957

Feb^y 23. 1827

BOSTON 14, MASSACHUSETTS

Massachusetts Eye and Ear Infirmary

ONE HUNDRED and THIRTIETH

ANNUAL REPORT

REPORTS FOR 1956

STAFF AND OFFICERS FOR 1957

243 CHARLES STREET
Telephone: LAfayette 3-8230

BOSTON 14, MASSACHUSETTS

18

MASSACHUSETTS EYE AND EAR INFIRMARY

Incorporated in 1827

The Massachusetts Eye and Ear Infirmary and its Clinics serve men, women, and children from all over New England and beyond who need expert care for diseases and injuries of the eye, ear, nose, and throat. Established in 1824, the Infirmary is one of the two oldest hospitals in the country specializing in the preservation of good eyesight and sound hearing.

The Infirmary is a voluntary hospital — an independent, non-profit, private institution. The Board of Managers is non-paid and the Staff of specialists give their services without charge to patients in the clinics and on the wards. The hospital receives no support from city or state but is financed by receipts from patients, by voluntary gifts and bequests, and by its share in the Community Fund as a "Red Feather Service." However, the Infirmary's allotment from the Community Fund is not sufficient to cover the amount the hospital gives in "free service" to patients from the Greater Boston area who cannot pay for their own care.

In many ways the Infirmary and the Massachusetts General Hospital, its neighbor, cooperate to give complete medical service to patients. The clinics of both hospitals share a common Admitting Office with its entrance on Fruit Street. Also, for maximum efficiency and economy, the two hospitals unite in such matters as purchasing, maintenance, and personnel management.

The wards and clinics of the Infirmary are open to those who are not able to pay doctors' fees, since the Staff give their services without charge to such patients. Every patient, in the clinics and wards as well as in the private accommodations, is under the medical and surgical care of Staff doctors who are specialists in Ophthalmology and Otolaryngology.

Whenever the patient is already under the care of a doctor, arrangements for his admission to the Infirmary should be made by his own doctor, or the patient should bring a letter from his doctor recommending admission to the hospital. However, any patient who is not under a doctor's care and who is not able to pay for private care, is eligible for treatment in the clinics and wards. In cases of emergency, of course, a patient is admitted immediately at any time of the day or night.

The Clinics, located on Fruit Street, are open daily except Sunday and legal holidays* for a fee of \$3.00† per clinic visit. After a preliminary interview, patients are examined by the clinic doctor and treatment is prescribed. If further treatment is necessary, the clinic patient is given an appointment for his next visit, as all but the first visit are by appointment only.

Patients are admitted to the wards by direct appointment with the Admitting Office, 243 Charles Street, from 9 to 10 A.M. daily except Sunday and legal holidays. Arrangement for admission to private and semi-private accommodations is made by the Staff doctor in charge of the patient, who then comes on the appointed day to the Infirmary Admitting Office.

Daily rates for board and room for service patients are \$18.00.† Semi-private rates are \$18.00,† \$21.00† and \$22.00.† Private rooms are from \$24.00† to \$33.00.† These rates include general nursing, ordinary medicine. Additional charges are made for operating room, X-Ray, laboratory tests, special nursing.

Blue Cross (Associated Hospital Service) plans are accepted at the Infirmary, the benefits being allowed as soon as approval has been received. All other non-profit insurance is handled by the patient for himself, and he pays the regular rates to the hospital.

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* Ear, Nose and Throat Clinic not open Saturdays in July and August.

† As of April 1, 1957.

Officers

BOARD OF MANAGERS, 1957

President	Henry Hixon Meyer, 53 State Street, Boston	1937
Secretary	Judge Edmund V. Keville, Pemberton Sq., Boston	1942-43, 1945
Treasurer	Horace W. Frost, 74 State Street, Boston	1940

Melville Chapin	84 State Street, Boston	1956
William H. Claflin, III	74 State Street, Boston	1947
Mrs. Richard Cary Curtis	Manchester, Mass.	1940
Wallace Falvey*	10 Post Office Square, Boston	1950
Robert H. Hopkins	82 Devonshire Street, Boston	1951
James C. Howe	53 State Street, Boston	1914
Patrick A. O'Connell*	154 Tremont Street, Boston	1934
William A. Parker	200 Berkeley Street, Boston	1935
Mrs. Sullivan A. Sargent	701 South Street, Needham	1945
Walter H. Trumbull	185 Meadow Brook Road, Weston	1929
Frederic Winthrop	Groton House, Ipswich	1943

* appointed by the Commonwealth

Corporation

(in addition to Managers)

William S. Ballard	45 Milk Street, Boston
Robert F. Bradford	53 State Street, Boston
Richard P. Chapman	28 State Street, Boston
William Ehrlich	120 Kingston Street, Boston
Mrs. John W. Farley	898 South Street, Needham
Nathaniel Faxon, M.D.	West Falmouth, Mass.
Francis W. Hatch, Jr.	N. E. Mutual, 501 Boylston St., Boston
Richard Harte, Sr.	Ames Company, North Easton
Thomas H. Hoare	6 Beacon Street, Boston
Weston Howland, Jr.	75 Federal Street, Boston
Mrs. Francis T. Hunter	56 Lawrence Road, Chestnut Hill
Mrs. Varaztad H. Kazanjian	191 Clifton Street, Belmont
William F. Keesler, Jr.	342 Beacon Street, Boston
Arthur T. Lyman	37 Thatcher Street, Westwood
George A. McLaughlin	11 Pemberton Square, Boston
Rev. Robert G. Metters	127 Main Street, Nantucket
August R. Meyer	53 State Street, Boston
Miss Amelia Peabody	120 Commonwealth Avenue, Boston
George L. Pew	17 Storer Street, Portland, Maine
Henry K. Porter	74 Foley Street, Somerville
Huston Rawls	84 State Street, Boston
Honorable Leverett Saltonstall	82 Devonshire Street, Boston
William L. Saltonstall	N. E. Mutual, 501 Boylston St., Boston
Arthur L. Sherin	80 Federal Street, Boston
Frederick H. Verhoeff, M.D.	395 Commonwealth Avenue, Boston
D. Harold Walker, M.D.	"Tree Tops," Peterborough, N. H.
Howland S. Warren	1 Federal Street, Boston

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Mr. Horace W. Frost
Mr. William H. Claflin, III
Mr. Robert H. Hopkins

FINANCE COMMITTEE

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Mr. Horace W. Frost
Mr. William A. Parker

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Dr. Edwin B. Dunphy
Dr. Charles L. Schepens
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Mr. Denholm M. Jacobs

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Mr. Horace W. Frost
Mr. William H. Claflin, III
Dr. Edwin B. Dunphy
Dr. LeRoy A. Schall
Mr. Francis S. Hill

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Dr. Endre Balazs
Dr. George P. Berry
Dr. David G. Cogan
Mr. David C. Crockett
Dr. Edwin B. Dunphy
Dr. Robert H. Gohd
Dr. W. Morton Grant
Mr. Francis S. Hill
Dr. Mahlon Hoagland, *Ex. Sec.*
Mr. Denholm M. Jacobs
Dr. George Kelemen
Dr. Moses H. Lurie
Dr. Philip E. Meltzer
Dr. LeRoy A. Schall
Dr. Charles L. Schepens
Dr. Herman J. Sternstein
Dr. William Stone, Jr.
Dr. Francis L. Weille

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Mr. Arthur L. Sherin
Mr. Francis S. Hill

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Mr. Francis S. Hill

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Mr. Robert H. Hopkins
Mr. Francis S. Hill

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Mr. Charles Wood
Mr. Raymond W. Lyons

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Mrs. Varaztad H. Kazanjian
Mrs. Joseph M. Clough
Mr. James C. Howe
Dr. Moses H. Lurie
Dr. Robert R. Trotter
Miss Ruth Farrissey, R.N.

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Mr. Melville Chapin
Dr. Abraham Pollen
Dr. George F. Reed

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Mr. Francis W. Hatch, Jr., *Chr.*
Mr. August Meyer
Dr. David G. Cogan
Dr. Daniel F. Miller

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Mrs. William B. Snow, Jr.
Mrs. Leslie Soule
Mrs. Philip H. Suter
Mrs. Channing S. Swan
Mrs. Thomas C. Thacher
Mrs. John E. Thayer
Mrs. Benjamin A. G. Thorndike
Mrs. D. Stephen Thrall
Mrs. Foster M. Trainer
Mrs. Robert Truesdale
Mrs. Frederick H. Verhoeff
Mrs. George Vinsonhaler
Mrs. Lyon Weyburn
Mrs. John R. Whitney
Mrs. Harold Willis
Mrs. Andrew Winslow, Jr.
Mrs. Stewart C. Woodworth

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Mrs. Harris P. Mosher

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Chief of Ophthalmology

Edwin B. Dunphy, M.D.

Consulting Chief of Ophthalmology

Frederick H. Verhoeff, M.D.

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Paul A. Chandler, M.D.
William P. Beetham, M.D.
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Trygve Gundersen, M.D.
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Brendan D. Leahey, M.D.

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Paul G. Haire, M.D.
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(leave of absence)
Thomas Cavanaugh, M.D.
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Earle S. Seale, M.D.
A. William Collinson, M.D.
Carl C. Johnson, M.D.
Abraham Pollen, M.D.
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Harry E. Braconier, M.D.
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D. Robert Alpert, M.D.
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David D. Donaldson, M.D.
Edwin B. Goodall, M.D.
Warren D. Haley, M.D.
Linley C. Happ, M.D.
Robert J. Herm, M.D.
John M. Hill, M.D.
Paul D. Hurley, M.D.
Irwin T. Mancall, M.D.
Daniel F. Milam, M.D.
(leave of absence)
Arthur M. Morrissey, M.D.
Bertha Offenbach, M.D.
Ichiro D. Okamura, M.D.
Irving Pavlo, M.D.
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Paul A. Runge, M.D.
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(military leave of absence)

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Morris Henry, M.D.
Robert Lawlor, M.D.
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Henry G. Ring, M.D.
Baruch J. Sachs, M.D.
David Stonecypher, M.D.
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Donald P. Tucker, M.D.

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Edward C. Ferguson, M.D.
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Kiroshi Ikui, M.D.
Pei-Fei Lee, M.D.
Silvio Pirquet, M.D.
Morton L. Rosenthal, M.D.
Michael Shea, M.D.
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Consulting Surgeons in Ophthalmology

Merrill J. King, M.D.
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Parker Heath, M.D.

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Surgeon for Plastic Operations

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John Irwin, M.D.

Bacteriologist
Anita Mangiarcine, A.B.

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A. S. Macmillan, Jr., M.D.

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Constantin Hionides, M.D.

Assistant Ophthalmic Pathologist
Toichiro Kuwabara, M.D.

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Research Virologist
Robert S. Gohd, Ph.D.

Biologist
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George Saslow, M.D.
Peter E. Sifneos, M.D.
Alfred H. Stanton, M.D.
Jerome L. Weinberger, M.D.
Avery D. Weisman, M.D.
LeMoyne White, M.D.
Vernon P. Williams, M.D.
Elizabeth R. Zetzel, M.D.

Consulting Pediatricians

Frederic M. Blodgett, M.D.
T. Berry Brazelton, M.D.
Allan M. Butler, M.D.
Leo B. Burgin, M.D.
Albert Cohen, M.D.
John D. Crawford, M.D.
Ralph W. Daffinee, M.D.
John A. V. Davies, M.D.
William A. Dickson, M.D.
Edward C. Dyer, M.D.
LeRoy L. Eldredge, Jr., M.D.
Robert N. Ganz, M.D.
Gerald A. Kerrigan, M.D.
Joseph L. Lewis, M.D.
Arthur J. Linenthal, M.D.
Francis C. McDonald, M.D.
Alexander S. Nadas, M.D.
Murray E. Pendleton, M.D.
William Pfeffer, Jr., M.D.
Charles V. Pryles, M.D.
Gertrud C. Reyersbach, M.D.
Ralph A. Ross, M.D.
Robert T. Sceery, M.D.
Mary Louise Scholl, M.D.
Marion L. Slemons, M.D.
Nathan B. Talbot, M.D.
Richard C. Tefft, Jr., M.D.
Wilhelmina VanDyke, M.D.
Louis Weinstein, M.D.
Eleonore C. Zaudy, M.D.

Consulting Surgeons

Marshall K. Bartlett, M.D.
Charles B. Burbank, M.D.
Bradford Cannon, M.D.
Edward D. Churchill, M.D.
Oliver Cope, M.D.
Gordon A. Donaldson, M.D.
F. Thomas Gephart, M.D.
Ward I. Gregg, M.D.
Edward Hamlin, Jr., M.D.
Francis M. Ingersoll, M.D.
Robert R. Linton, M.D.
William V. McDermott, Jr., M.D.
John B. McKittrick, M.D.
George L. Nardi, M.D.
William C. Quinby, Jr., M.D.
Horatio Rogers, M.D.
J. Gordon Scannell, M.D.
Fred A. Simmons, M.D.
Richard H. Sweet, M.D.
Grantley W. Taylor, M.D.
Howard Ulfelder, M.D.
William R. Waddell, M.D.
Claude E. Welch, M.D.
Frank C. Wheelock, Jr., M.D.

Consulting Neurosurgeons

H. Thomas Ballentine, Jr., M.D.
William H. Sweet, M.D.
James C. White, M.D.

Consulting Orthopedists

Otto E. Aufranc, M.D.
Joseph S. Barr, M.D.
Thomas F. Broderick, Jr., M.D.
Thornton Brown, M.D.
Edwin F. Cave, M.D.
Robert J. Joplin, M.D.
Paul L. Norton, M.D.
Eugene E. Record, M.D.
John A. Reidy, M.D.
Carter R. Rowe, M.D.

Consultant in Contagious Disease
Edwin H. Place, M.D.

Consultant in Preventive Medicine
John E. Gordon, M.D.

Consultant in Pharmacology
Otto Krayer, M.D.

Consulting Urologists

Sylvester B. Kelley, M.D.
Walter S. Kerr, M.D.
Wyland F. Leadbetter, M.D.
Saul M. Marcus, M.D.
Victor Politano, M.D.
Howard I. Suby, M.D.
Lorande M. Woodruff, M.D.

Consulting Endoscopist

Edward B. Benedict, M.D.

Consulting Pathologists

Benjamin Castleman, M.D.
Richard B. Cohen, M.D.
Winfield S. Morgan, M.D.
Agnes Burt Russfield, M.D.
Robert E. Scully, M.D.
Donald C. Sniffen, M.D.
David Spiro, M.D., Ph.D.
Edgar B. Taft, M.D.
Austin L. Vickery, Jr., M.D.

Consulting Radiologists

Joseph Hanelin, M.D.
Laurence L. Robbins, M.D.
Milford D. Schulz, M.D.
Stanley M. Wyman, M.D.

Consulting Bacteriologists

Louis Dienes, M.D.
Lawrence J. Kunz, Ph.D.

Service Pins

Members of the Medical Staff receiving the two-star pin for 25 consecutive years on the active staff:

Charles H. Allman, M.D.
William P. Beetham, M.D.
Walter J. E. Carroll, M.D.

Thirty Year Pin

Ruth W. Hutchinson, R.N.
Administrative Assistant

Twenty Year Pin

A. Georgakopoulos
Maintenance

Ten Year Pin

Cora Cole
Residence Housekeeping

Mrs. Mary O'Mally Geswell, R.N.
Nursing

Eleanor Hayes, R.N.
Nursing

Raymond Lyons
Comptroller

Rose Maynard
Nursing

Margaret Rock, R.N.
Nursing

Dorothy Sayer
Nursing

The Clinics

Assistant Director in Charge of Clinics . . . . E. Michael White
Executive Officer . . . . Ruth Farrissey, R.N.

Howe Laboratory of Ophthalmology

Director — David G. Cogan, M.D.

David D. Donaldson, M.D.
W. Morton Grant, M.D.
Kevin Hill, M.D.
Jed L. Howard, A.B.
Hiroshi Ikui, M.D.
Harold L. Kern, Sc.D.
Jin H. Kinoshita, Ph.D.
Toichiro Kuwabara, M.D.
Maurice E. Langham, Ph.D.
Pei-Fei Lee, M.D.
Lorenzo O. Merola, B.S.
Robert R. Trotter, M.D.
Robert C. Watzke, M.D.

Winthrop Foundation and Clinic for the Deaf

Surgeon in Charge — Philip E. Meltzer, M.D.

Associate Surgeon in Charge
Donald K. Lewis

Surgeon
Francis S. Weille

Assistant Surgeon
Bernard Zonderman, M.D.

Audiologist — Alan Feldman, Ph.D.

Executive Committee

D. Harold Walker, M.D., *Chairman*
LeRoy A. Schall, M.D.
Donald K. Lewis, M.D.
Philip E. Meltzer, M.D.
Moses H. Lurie, M.D.
Francis L. Weille, M.D.

Retina Foundation

Director — Charles L. Schepens, M.D.
Associate Director — Endre A. Balazs, M.D.

Axel Bothner-By, Ph.D.
Christine T. Bothner-By, Ph.D.
Robert J. Brockhurst, M.D.
Gordon L. Brownell, Ph.D.
S. James Bullington, M.D.
Anima Devi, Ph.D.
Marcella H. DeRoche, A.B.
Allen R. Gaynor, B.S.
John Gergely, M.D., Ph.D.
Arthur F. Howe, Ph.D.
Gaida B. Hirss, B.S.
Marie A. Jakus, Ph.D.
Juanita M. Johnson, B.S.
Charles V. Mahlmann, M.S.
June E. Mendleson, B.S.
Ichiro D. Okamura, M.D.
Adolph Pietruszkiewicz, B.S.
Marion A. Ryan, A.B.
John G. Sebestyen, M.D.
Michael Shea, M.S.
Alice F. Spencer, B.S.
William J. Stenstrom, B.S.
Lars Sundblad, M.D.
Laszlo Varga, Ph.D.
Silvio R. von Pirquet, M.D.
Ernst Wolf, Ph.D.
Claudine Z. Yannoni, A.B.
Benjamin Ziv, M.D.

Boston Eye Bank Serving New England

Executive Committee

Edwin B. Dunphy, M.D.
Brendan D. Leahey, M.D.
Mrs. William A. Slade, Jr.
Henry Hixon Meyer
Mrs. Richard Cary Curtis

General Director: Garrett L. Sullivan, M.D.
Executive Secretary: June Vine

Treasurer's Report

BALANCE SHEET
September 30, 1956

ASSETS

Cash in Bank and on Hand		$ 368,973.51
Investments - Book Value:		
Securities	$3,810,197.88	
Interest in parcel of real estate	1.00	
Interest in unsettled estate	1.00	3,810,199.88
Accounts Receivable:		
Patients - less reserve for doubtful accounts	$ 115,133.24	
Miscellaneous	12,284.53	127,417.77
Inventories of Supplies, etc.		21,631.13
Plant:		
Land and buildings acquired prior to January 1, 1949 (book value)	$ 491,741.99	
Additional facilities acquired since January 1, 1949 (cost)	890,703.47	
	$1,382,445.46	
Less: Reserve for depreciation	295,000.00	1,087,445.46
Construction in Progress		1,089,278.39
TOTAL		$6,504,946.14

LIABILITIES AND FUNDS

Advances from Patients	$ 2,562.53
Accounts Payable and Accruals	96,418.40
Special Funds	11,529.39
General Fund	3,066,771.13
General Pension Reserve	196,293.91
Research Fund	13,000.00
Permanent Funds - Income Restricted	737,287.95
Permanent Funds - Income Unrestricted	2,230,515.38
Special Purpose Funds	113,983.41
Unexpended Restricted Income of Permanent Funds	36,584.04
TOTAL	$6,504,946.14

INCOME ACCOUNT

For the period ended September 30, 1956 (52 weeks)

Hospital Income as per Director's Report			$1,650,018.19
Less: Hospital expenses as per Director's report — See Note		$1,969,825.83	
Hospital operating expenses charged directly against Permanent Funds		39,354.74	
		$2,009,180.57	
Deduct: Hospital operating expenses charged directly against Permanent Funds:			
Permanent Funds — Income	$15,771.72		
Permanent Funds — Principal	23,583.02	39,354.74	
Net Hospital Expenses			1,969,825.83
Excess of Hospital Expenses over Hospital Income			$ 319,807.64
Income from investment securities, less income applicable to Restricted Funds and to General Pension Reserve		$ 179,495.88	
Receipts from United Community Services, Committee of the Permanent Charity Fund, Inc., Estates of Elisha V. Ashton, G. Gorham Peters and others		46,913.64	
		$ 226,409.52	
Less: Treasurer's Disbursements		15,297.90	211,111.62
Deficit for the Period			$ 108,696.02

Note: Includes provision for depreciation — $107,000

AUDITORS' CERTIFICATE

We have examined the balance sheet of Massachusetts Eye and Ear Infirmary as at September 30, 1956 and the related income account for the period ended at that date (52 weeks).

Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The accompanying statements reflect a provision for depreciation in the amount of $107,000 based on a percentage of the patient care expenses of the Infirmary. This provision has been recorded in accordance with the requirements of statutory authority pertaining to per diem reimbursement for hospital services rendered under contract with certain third party agencies. We are unable to express an opinion as to the adequacy of the provision for depreciation in relation to plant costs.

Subject to the exception noted above, in our opinion, the accompanying balance sheet and related income account present fairly the financial position of Massachusetts Eye and Ear Infirmary at September 30, 1956 and the results of its operations for the period ended at that date, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding period.

Patterson, Teele & Dennis

SUMMARY OF INVESTMENTS

(As of September 30, 1956)

	Book Value*	Market Value*	% Market Value
BONDS:			
U. S. Government	$1,041,926	$1,017,280	16.5%
Canadian Government	53,000	50,850	0.8%
Railroad	197,133	171,350	2.8%
Public Utility	95,307	90,920	1.5%
Industrial	159,115	154,330	2.5%
Financial	19,825	19,400	0.3%
Miscellaneous	1,900	1,900	....
TOTAL BONDS	$1,568,206	$1,506,030	24.4%
PREFERRED STOCKS:	$ 141,929	$ 164,950	2.7%
COMMON STOCKS:			
Railroad	$ 173,008	$ 346,475	5.6%
Public Utility	401,294	637,126	10.3%
Industrial	877,758	2,505,833	40.6%
Bank and Finance	290,873	402,660	6.5%
Insurance	235,849	420,800	6.8%
Investment Trust	25,000	47,500	0.8%
TOTAL COMMON STOCKS	$2,003,782	$4,360,394	70.6%
TOTAL GENERAL FUND	$3,713,917	$6,031,374	97.7%
WINTHROP FUND	85,775	130,105	2.1%
WEBER FUND	10,500	10,247	0.2%
GRAND TOTAL	$3,810,192	$6,171,726	100.0%

* Cents omitted.

OPERATING ANALYSIS

For the period ended September 30, 1956 (52 weeks)

Income from Patients	$1,741,358.20
Income from Other Sources	85,883.40
TOTAL GROSS HOSPITAL INCOME	$1,827,241.60
Allowances to Patients for "free care"	122,710.66
Further Deductions for Bad Debts	8,110.95
Allowances to Blue Cross and Other Agencies	46,401.80
TOTAL FREE SERVICE	$ 177,223.41
NET INCOME	1,650,018.19
Salaries and Wages	$1,060,104.21
Supplies and Expenses	562,763.78
Clinic Expenses	221,544.34
Extraordinary Expenses	18,413.50
TOTAL OPERATING EXPENSES	$1,862,825.83
DEPRECIATION	107,000.00
HOSPITAL DEFICIT	212,807.64
TOTAL HOSPITAL DEFICIT	$ 319,807.64

HORACE W. FROST,
Treasurer

Administration

Director	Francis S. Hill
Assistant Director	Charles T. Wood
Comptroller	Raymond W. Lyons
Administrative Assistant	Kenneth W. Cadman
Administrative Assistants, Admitting Office	Henrietta Olsen, R.N. Ruth W. Hutchinson, R.N. Mrs. Ruth Gutteridge, R.N. Ruth Straitiff

Development and Resources

Associate Director	Denholm M. Jacobs

Nursing Department

Director of Nursing Service and Nursing Education	Mrs. Margaret Verrill, R.N.
Acting Assistant Director of Nursing Service	Dolores Hernandez, R.N.

Directors of Departments

Dietary	Patricia Walsh
Housekeeping	William M. Cohan
Medical Social Service	Isabel Whiting
Occupational Therapy	Mrs. Patricia Huddleston
Optical Shop	Albert E. Maver
Public Relations	Mrs. Virginia Gerould

Directors of Units

Librarian	Charles Snyder
Patients' Accounts	Irwin Hertz

Comparative Statistics

HOSPITAL

	1955	1956
Ward Patients — Eye Cases	1,559	1,481
Ear, Nose and Throat Cases	1,192	1,204
Total Admitted to Wards	2,751	2,685
Private Patients — Eye Cases	2,373	2,627
Ear, Nose and Throat Cases	1,943	2,406
Total Private Patients	4,316	5,033
TOTAL PATIENTS ADMITTED	7,067	7,718
Operations, Ward — Eye Cases	1,464	1,365
Ear, Nose and Throat Cases	941	988
Operations, Private — Eye Cases	2,487	2,776
Ear, Nose and Throat Cases	1,728	2,189
TOTAL OPERATIONS	6,620	7,318

CLINICS

	1955	1956
New Patients — Eye Clinic	5,364	5,014
Ear, Nose and Throat Clinic	3,174	2,600
TOTAL NEW PATIENTS	8,538	7,614
Revisits — Eye Clinic	36,019	37,355
Ear, Nose and Throat Clinic	19,790	19,303
TOTAL CLINICAL REVISITS	55,809	56,658
Visits — Eye Clinic	41,383	42,369
Ear, Nose and Throat Clinic	22,964	21,903
TOTAL CLINICAL VISITS	64,347	64,272
Emergency Patients Admitted to Hospital	155	169
Patients Admitted to Emergency Ward	5,013	5,037

Comparative Statistics

	1955	1956
Patients Days Care — Wards	21,270	19,975
Private	27,250	29,293
Total Patients Days Care	48,520	49,268
Average Number of Patients Treated Daily —		
Wards	58	55
Private	75	81
Total Average Treated Daily	133	136
Average Number of Days Patients Remain — Wards	7.7	7.4
Private	6.3	5.8
Beds Available and Percent of Occupancy — Wards	91 64%	86 64%
Private	99 75%	104 77%
Total Beds Available	190	190
Per Capita Cost Per Day — Wards, Routine Care	$18.38	$18.65
Special Services	7.16	7.83
Total Cost Per Day Per Ward Patient	$25.54	$26.48
Per Capita Cost Per Day—Semi-Private, Routine Care	$18.76	$20.72
Special Services	8.66	8.70
Total Cost Per Day Semi-Private Patient	$27.42*	$29.42*
Per Capita Cost Per Day — Private, Routine Care	$23.85	$23.83
Special Services	6.73	10.01
Total Cost Per Day Per Private Patient	$30.58*	$33.84*
Condition of Ward Patients on Discharge — Died	7	11
Autopsies	57%	63%
Left Against Advice	0	0
Discharged	2,727	2,689
Percentage of "Free Care" — Compiled on Dollar Value, not including Blue Cross:		
House Patients	4.2%	3.0%
Out-Patients	28.4%	26.3%
Total "Free Care"	8.9%	7.1%

* With Depreciation Added.

Report of the Board of Managers

The period covered by this One Hundred and Thirtieth Annual Report of the Infirmary was one of great activity and expanding service to the community. More patients were admitted to the hospital and more operations were performed—the increase in each case approximating 10 per cent. On the other hand the total number of patient-days advanced slightly less than 2 per cent with the satisfactory result that the average stay of patients in the hospital was reduced from 6.9 days to 6.4 days. In other words the duration of hospitalization was cut approximately 7 per cent.

When considering the present high daily costs of hospitalization, it is well to remember a number of facts which are, perhaps, not generally understood or taken into consideration. The science of medicine has made such strides in recent years that as of today every patient admitted to a hospital stands a better chance of complete recovery than he did only a few years ago. The medicines, antibiotics, equipment and procedures which are contributing to improve the chances of recovery are often very expensive, but who would wish for that reason to deny any of them to a sick person? The average stay today in a hospital for almost any condition is so much less than a few years ago that the net cost to the patient has not increased in proportion to the increase in the daily hospital charges. In fact in many cases the net cost is much less. For example, at the Infirmary there are a number of conditions now corrected routinely in a matter of days which formerly required several weeks without nearly the same hope of success.

And so to summarize: It costs more and more to be sick but the chances of recovery improve every year and the period of recovery becomes less and less.

The reason for this improvement and our best hope for the future lies, as I have said so many times before, in the success of research. The Infirmary will continue to undertake and support appropriate research programs in its specialties in its own and its affiliated laboratories to the greatest extent permitted by availability of space and funds. At the present time the new research floors and every other available inch within the hospital is so occupied, and the affiliated laboratory of the Retina Foundation is severely handicapped by lack of space. It should be understood that this great effort which last year cost half a million dollars was financed principally by income from endowments restricted to research and by grants and gifts from individuals, funds, foundations, industries and government agencies. Out of a budget of more than Two Million Dollars only $37,000 was expended last year for research by the Infirmary from its operating income. This amounted to approximately seventy-five cents per patient day. Every patient in the hospital profits from research conducted in the past and each one makes his small contribution to help future patients.

HARVARD MEDICAL CENTER FORMED

After consideration for a number of years Harvard Medical Center has become a reality. It is a separate Massachusetts charitable corporation. The members of the corporation are the Dean of the Harvard Medical School and the president or chairman of the board of each of the seven teaching hospitals affiliated with the Harvard Medical School. These hospitals are: Massachusetts Eye and Ear Infirmary, Massachusetts General Hospital, Peter Bent Brigham Hospital, The Children's Hospital, Beth Israel Hospital, Boston Lying-in Hospital and Free Hospital for Women. The chartered purposes of Harvard Medical Center are in substance: to improve and advance the knowledge, practice and teaching of medicine in all its branches; to assist in the advancement of medical research and investigation and in the improvement of medical teaching facilities and methods; to solicit and receive contributions from whatever sources, in trust or otherwise and whether unrestricted or for designated purposes or subject to specified conditions, and to contribute from any unrestricted funds, principal or income, to the general support or to specific undertakings of the Harvard Medical School, the Harvard School of Dental Medicine, the Harvard School of Public Health and of the several teaching hospitals from time to time affiliated for research and teaching purposes with the Harvard Medical School.

The Center will bring together the Dean of the Medical School and the representatives of the teaching hospitals in frequent consultation on matters associated with the academic responsibilities of the group; that is to say, teaching and research and the acquisition of endowments to support those particular responsibilities. The group will strive to direct the academic work of each institution into one cohesive effort to provide for our country the educated doctors and teachers of medicine it needs so desperately and to assist and correlate the research programs in the several institutions.

The successful operation of a great hospital entails the untiring efforts of many competent people, professional and lay, cooperating together in one common purpose. The results of the last year demonstrate once more competence and cooperation of a high order.

Henry Hixon Meyer
President

Report of the Director

THIS report, my tenth as Director of the Infirmary, covers the fiscal year from October 1, 1955 through September 30, 1956. In the one hundred and thirty-two year history of the hospital this decade is a short span, yet it represents a period of rapid change. For instance, salaries and wages have increased substantially, the average stay of patients has been considerably shortened, there have been many important structural changes in our buildings, and research has been greatly advanced.

The opening in 1956 of the three new research floors constructed on top of the Connecting Building gave additional impetus to research. This expanded space which was officially dedicated on May 21, brought together for the first time all but two of the various laboratories into one efficient area directly over and adjacent to the Clinics of the hospital.

At the present time, the budget for research carried on by the Eye and the Ear, Nose and Throat services amounts to approximately $500,000. Fifty-six full-time and several part-time employees are taking part in the program. Growth alone does not bring results, but the increased tempo shown in research at the Infirmary during the past year is definitely stimulating. A review of the actual work in progress will be covered in the reports of the two Chiefs and in publications from the various laboratories.

With 42 projects under way, it was found necessary to add a full-time accountant to handle the financial detail. Also the Research Committee has a part-time executive secretary to assist in the functioning of the committee and to review applications for research funds from private sources and government agencies. During the year the Infirmary contributed operating funds exceeding $37,000 to this research program.

In addition to the research floors, other construction completed during the year was the front entrance with its elevator, the remodeled Refraction Room, Subnormal Vision Room, Ocular Motility lanes, and Dr. Stone's Ophthalmic Plastics Laboratory in Gardner Building. Still other less dramatic, perhaps, but no less important additions to our working efficiency were the completion of the linen chute and an electric power tie-feeder to the White Building of the Massachusetts General Hospital which gives us added electrical security.

The renovation of the first floor administrative offices, the new emergency rooms and doctors' offices, and the doctors' dining room across from the cafeteria in the basement will be completed shortly after the year end. We are grateful to the Ford Foundation for the funds needed to make these improvements possible. We expect that the attractive Gift Shop organized by the Ladies Visiting Committee off the rotunda on the first floor will be finished and in business for the Christmas buying. The Shop will be manned by Ladies Visiting Committee volunteers, and we look forward to a pleasant and profitable association for the hospital.

FINANCIAL REPORT

It is particularly gratifying to report a deficit of only $1,700 before depreciation for the year just ended. Depreciation again was shown on our operating statement as a bookkeeping item but was not funded. Total operating expenses for the first time were over $2,000,000 and overall expenses were up nearly 10%. Part of this unusually large increase resulted from additions to the salaried medical staff caring for patients both in the house and the clinics. Salaries now account for 68% of the total expense of the hospital. Careful planning of personnel and wages in the budget for the coming year becomes, therefore, one of our most important concerns.

In commenting on the importance to the hospital of the increase in salaries and wages, the so-called fringe benefits now given to our employees in addition to actual hourly rates should also be noted. A recent survey shows that these benefits, such as social security, pensions, medical care, etc. amount to the surprising total of $350 per employee per year, or $6.73 per week.

Occupancy figures for the hospital and clinic visits were almost exactly the same as for the previous year, as will be seen by a glance at the comparative statistics in the middle pages of this report. Room rates had to be increased in January—$2 for private and semi-private and $1 for ward accommodations, in order to maintain the realistic relationship between charges and costs.

In considering hospital finances, the importance of keeping our beds occupied cannot be overemphasized. If it were possible to increase the occupancy of our beds by only 5%, the cost of caring for one patient for one day would decrease $1.66 and we could be assured of breaking even for 1957. But with the progressively shorter length of stay—now approximately 6½ days, we find a growing tendency towards empty beds over week-ends, particularly long holiday week-ends.

Moreover, the definite trend reducing the number of "service patients" admissions makes it difficult to keep a satisfactory occupancy in the wards on the second and third floors. Suggestions for the possible physical rearrangement of these areas, to make them more flexible in the type of patients they will accommodate, have been submitted to the architects, and continuation of these studies will have a high priority in the future.

Special equipment purchased during the year and charged to expense came to $18,400. The larger items were furniture for the 12 rooms on Baker 9, refrigerators for the cafeteria, lockers, operating room lights and optical instruments. Ordinarily the cost of these items of equipment might be capitalized, but at the present time, they are being set aside in a special account and added to current expenses.

PATIENTS' ACCOUNTS

Two years ago a new department was formed under the name of Patients' Accounts, to take over the responsibility for credit and collections and the processing of insurance forms. During this time the new department has proved an aid to good hospital-patient relations.

Primarily, it aims to assist the patient and his family to find the best possible way to finance his hospital stay. This is done by seeing the patient who might have difficulties prior to admission, if possible, and explaining our charges and what payments he is expected to meet. When the patient cannot afford to pay full costs, we assist him in seeking outside aid through welfare and other agencies. In some cases, it may be a matter of arranging for payments over a period of time, or when necessary, for "free service."

A further important part of this department's work is collecting delinquent accounts, and here again, patient relations are all important. Our policy is one of fairness and consideration tempered with firmness when needed—a policy that calls for a realistic attitude carried out with a great deal of tact and understanding.

OCCUPATIONAL THERAPY

In the recent past our OT Department has been mainly concerned with aiding patients with separation of the retina. Today, however, improved surgical techniques have resulted in shorter hospitalization and a more hopeful prognosis for our many retina patients, and so the retina program no longer requires the major portion of the therapists' time.

Emphasis is now being placed on a group of patients coming to the Infirmary in increasing numbers for total laryngectomy. Arrangements have been made so that these patients can go to the OT Clinic in the basement where morning and afternoon sessions are held in wood working and other crafts suitable for the older men who make up the greater proportion of cancer of the throat cases. Here new interests and the more cheerful atmosphere play an important part in their rehabilitation.

Careful records are kept of all OT treatments, and are added to the patient's file. This new program has proved so successful that the Otolaryngological staff doctors feel it is aiding materially in the recovery of these long-term patients.

A varied schedule of teaching is also carried on by the three full-time therapists. During the past year the Infirmary was one of the few hospitals chosen to have 12 students from the Boston School of Occupational Therapy for post-degree clinical training. In addition, each term a group of girls come from several of the nursery training colleges in Boston for accredited time, to supervise in our Children's Wing playroom. This teaching program is of assistance in caring for out patients and is also stimulating for the therapists.

NURSING

In spite of the staffing problems, particularly for the evening and night periods, which we have in common with most metropolitan hospitals, the Nursing Department was able to get through the year with coverage for our various units. To accomplish even minimum care, the use of part-time nursing personnel was found necessary. Many of these part-time nurses are taking courses, and we hope they will return to the Infirmary full time when they have completed their education.

Much time and effort has gone into standardizing of equipment on all floors which has helped give more effective nursing service. Progress is also being made in revising all nursing procedures. Bi-weekly meetings of the Nurses and Doctors Joint Committee are being held to review and improve all phases of patient care. Few realize how much time, effort, and enthusiasm are contributed by members of the medical staff to the various hospital committees, like this new doctor-nurse group.

Education in the Nursing Department is being carried on at five different levels, from the graduate nurse to the nurses' aide. A new program for the practical nurse was started during the year, and already five have been awarded their certificates. It is through these teaching programs in our specialties that we will attract future replacements for our staffing needs.

As the year closed, there was every indication that a scholarship plan to assist our nurses in obtaining college credits could be arranged, to take effect by the first of the calendar year. The Ladies Visiting Committee has generously indicated its interest in getting this program started. It will be set up not only to attract nurses into our specialties but also to increase the incentive of nurses already employed to seek advanced education, which in turn will ultimately assure the highest standards of patient care.

HOUSEKEEPING DEPARTMENT

The Housekeeping Department continued to broaden its scope during the year by taking over and organizing a small dispatch service to run errands and move patients throughout the hospital. As many of these duties were previously carried on by the Nursing Department, the new service has proved a great convenience and already appears to be a permanent addition.

Another labor and money saving undertaking has been the revision of the linen control. A new system based on predetermined quotas for each floor was established and maintained on a seven-day-a-week schedule. It has now been in successful operation for several months.

Closer supervision of floors has been put into effect in spite of the shortage of personnel available. The on-the-job training program the department has in progress will help train new employees and also upgrade the work.

Finally, the relocation of the housekeeping office and the stock and receiving room has made for more efficient operation. The Director of Housekeeping is now responsible for housekeeping, linen control, dispatch service, stock room, and care and replacement of furniture.

DIETARY

During the year just ended, we have received many compliments from our patients on the food they received while they were hospitalized, while complaints were very few in number. The Dietary Department, however, is always seeking ways to improve service so in August an experiment was tried for a week, changing the pattern of patients' meals.

Instead of serving dinner at noon with a light supper at night, according to hospital custom, these two meals were reversed to conform to the general pattern of most people today. The results of the experimental week proved so satisfactory to our patients that plans are under way to make the change possible. As this will involve a complete reorganization in the kitchen work schedule, it cannot be done immediately, but we hope to make the change early in 1957.

The cafeteria again has shown a tremendous increase in the volume of meals served, the number increasing by 13,605. The opening of the doctors' dining room scheduled for early in the year, will relieve much of the congestions at the lunch hour, and new lighting and redecoration is planned for the cafeteria itself. Also, new more compact tray trucks, now on order, will add to the appearance of the corridor and to the efficiency of the service.

PERSONNEL CLUB

This fall Infirmary employees organized a Personnel Club. For their first event the Club is planning a Christmas party to be held outside the hospital to which all members and their guests—from Board of Managers, Ladies Visiting Committee, medical and nursing staffs, laboratory personnel, etc.—will be invited. The Club will take over management of the annual spring picnic and plans to have other events and gatherings in the year ahead.

LOOKING TO THE FUTURE

In a growing institution, there is always pressure for more room, better equipment, and improvement in physical structure. Although the priority list at the Infirmary has been reduced to a great extent during the last few years, there are still areas that require attention.

Plans for renovating the X-Ray Department and replacing some of the older equipment are being studied and a definite recommendation will be made shortly.

Mention has already been made of the low occupancy in the wards and the need for making this important patient area more flexible.

A new doctors' paging system is long overdue.

The present accommodations of the Glaucoma Consultation Service are completely inadequate for this growing service.

Rearrangement and modernization of the Ear, Nose and Throat teaching area is under consideration in order to make better use of the available rooms.

An auditorium with a seating capacity of at least 250 seats, for the many types of medical meetings now held or that should take place under our own roof, is one of the Infirmary's most urgent needs.

The ways and means of accomplishing these needs is the challenge of the future.

Francis S. Hill
Director

Department of Ophthalmology

The Department of Ophthalmology seems to be caught up in the whirlpool of activity which characterizes modern life. The space in the new research building, which seemed reasonably adequate two years ago in the planning stage, is now all occupied and more is needed. The availability of U. S. Public Health Service funds to further research has spurred many investigators to expand the scope of their activities.

The continued growth of voluntary insurance plans, plus the general prosperity, has changed the balance between ward and private patients, with a large increase in the latter category. This puts a big strain on private and semi-private floor space. If this trend continues, the clinical material available for residents' training may dry up. So far, we have not felt the pinch but I can visualize the time when much more use must be made of private patients for teaching. Using them for demonstration purposes can be easily done but the actual surgical training of residents poses a problem.

Residency training has become a government concern to some extent. The U. S. Public Health Service is desirous of developing scientists and teachers in the various fields of medicine. It is willing to give training grants to qualified institutions to help finance certain young men, training them in such a way that they will be induced to stay in academic ophthalmology, rather than go into the more lucrative field of private practice. This means adding a year to the training period for certain residents, who demonstrate the capacity for clinical investigation and teaching. The Infirmary, believing that we have the facilities to create such investigators and teachers, has applied for one of these training grants.

IN THE EYE CLINIC

The Eye Clinic and its sub-departments continue to be a busy center of activity. During the past year, 42,369 patient visits were made. The establishment of the emergency room near the Charles Street entrance greatly facilitates the seeing of those patients who come to the hospital after regular clinic hours.

Dr. Sloane reports that the Refraction Department is making full use of its improved facilities. Six modern booths have been installed. A lensometer, a streak retinoscope and trial case were added to our equipment. The Subnormal Vision Department has now examined several hundred patients and has served in the capacity of teaching these techniques to the house officers. Mr. Roland Blanchard has been engaged as a full-time refractionist. He is also in charge of all equipment in the Refraction Department.

A real effort has been made to see patients needing refraction on the same day as their visit to the clinic. As a result, we no longer have a big backlog of appointments. The number of refractions done was 7,824; approximately the same as in the previous year. An attempt has been made for better instruction in refraction by having a visiting staff member in the Refraction Department each morning responsible for instruction of the junior residents.

Dr. Garrett Sullivan reports that 1,071 perimetric examinations were performed in the Field Room. Several new pieces of equipment have been added.

The Ocular Motility Clinic, under the direction of Miss Ann Stromberg, had 7,152 patient visits, 600 of these being by private patients referred by members of our visiting staff. One orthoptic student from Simmons College completed the course during the year.

The Retina Service has continued to increase. In the past year, 4,029 visits were made to this service, of whom 1,114 were new patients; 765 patients were operated upon. In addition to the regular staff of Dr. Schepens, Dr. Okamura, Dr. Brockhurst, and Dr. von Pirquet, there are a number of special fellows who come for one year of training. Studies on peripheral uveitis and histological changes after diathermy and implantation of polyethylene tubes are continuing. Statistical analysis is being carried out on retinal detachment cases in conjunction with a thorough follow-up of post-operative conditions. This should bring about a better understanding of this disease and its treatment.

The Glaucoma Consultation Service, with Dr. Trotter in charge, has been a definite success as a special study center for glaucoma patients. Dr. Pei-Fei Lee* is making a study of the gonioscopic and tonographic findings of patients before and after cataract surgery.

The Board of Managers has created an additional position for Dr. Trotter, that of "Assistant to the Chief of Ophthalmology." He has been very helpful in solving some of the administrative problems connected with a busy institution.

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* *A special fellow of the U. S. Public Health Service.*

THE EYE BANK

Mrs. W. A. Slade, Jr., has resigned as executive secretary of the Eye Bank to take another responsible position at the Infirmary. She has given several years of devoted service and will be greatly missed. She has been succeeded by Miss June Vine. Seven new affiliated hospitals have joined the program and 749 new donor forms have been returned. We received 116 eyes during the year, approximately the same as the preceding year. The increased interest in the program is attested by the fact that 992 inquiries were received and 47 lectures were given.

The Eye Bank has many benefactors. During the week of May 21, the Checker Cab Co. carried publicity on the windows of 264 cabs. The Boston Host Lions Club made possible other publicity on Boston streetcars for three months during the summer. Through the generosity of Dr. Francis Weille, instruments and materials have been purchased to form a second enucleation kit. Mrs. Richard Cary Curtis made possible the publication of the first complete report of the Eye Bank in the form of a sixteen page pamphlet. The work of the Eye Bank has also been publicized by several newspaper articles and by an exhibit at the Brookline Health Fair, the New England Hospital Assembly meeting and the North Reading Lions Club.

EYE PATHOLOGY

The Eye Pathology Department has moved into its new home in the top floor of the research building. These modern quarters with new equipment were made possible by the generosity of Mrs. Adolph Erhlich, in memory of her late husband.

Dr. David Cogan, who temporarily headed the Pathology Department after Dr. Heath's retirement, has now relinquished that position to Dr. Taylor Smith, former Associate Pathologist. Dr. T. Kuwabara has been appointed Assistant Pathologist.

Dr. Smith reports 204 whole eyes were processed last year and 333 biopsies were performed. The weekly pathology conferences for residents and others are being continued and are most instructive.

THE LIBRARY

The Howe Library, now administered separately from the Howe Laboratory, is under the able direction of Mr. Charles Snyder, who provides excellent service to both the eye and the ear, nose and throat staffs. This library, which occupies beautiful quarters in the new research building, is a model of good planning and administration.

HOWE LABORATORY

The Howe Laboratory now occupies one entire floor of the new research building. Its many activities in the field of ophthalmic research are given in detail in its annual report for 1956. These encompass studies into the mechanisms which tend to stabilize intraocular pressure, initiated by Dr. Charles Rife and now carried on by Dr. Maurice Langham, a visiting physiologist from London; continuation of studies on fat formation in the eye by Drs. Cogan and Kuwabara; the biochemistry of the lens in cataract formation by Dr. Jin Kinoshita; toxicological effects on the cornea by Drs. Grant and Kern; and the effects of radiation on the eye by Drs. Cogan and Donaldson. Dr. Kevin Hill is attempting to cultivate corneal cells in the test tube with a view of controlling fat formation by these cells by varying the nutrient media.

Members of the Howe Laboratory staff continue their active participation in teaching in the Harvard Postgraduate Course in Ophthalmology and in the residents' training program at the Infirmary. Also, Dr. Cogan and Dr. Donaldson gave a two weeks' course in ophthalmic neuro-anatomy and neuro-ophthalmology at the Clinical Center of the National Institutes of Health in Bethesda, Maryland. Another item in the field of education has been Dr. Cogan's revision of his book on the Neurology of the Ocular Muscles.

Dr. Donaldson, assisted by Dr. Sheldon Stein and Dr. Robert Watzke, has continued to build up his collection of stereoscopic slides portraying many ophthalmologic diseases. About two hundred of these have been organized with brief histories and discussions for the use of students. Another set of stereophotographs of the anterior chamber angle has been collected to be used in connection with an atlas.

RETINA FOUNDATION

During the past year most of the research activities of these laboratories have centered around two connective tissues of the eye; namely, the vitreous body and the cornea. The general goal of the investigations on the vitreous was to describe its physical and chemical structures and to find out something about its formation and metabolism. Reference is made to the annual report of the Foundation for detailed information.

In brief, Dr. Balazs and Dr. Szirman have made histochemical investigations of the hyaloid membrane with particular reference to special cells found here.

Dr. Howe and Dr. Balazs have studied the effect of high energy radiation on the vitreous body.

Dr. Bothner-By has been interested in the effect of irradiation on different sugar solutions.

The eye, shape and interaction of the hyaluronic acid molecule were studied by Dr. Varga and his associates.

The use of nuclear magnetic resonance to study the interaction between water and various micro molecules is being explored. Dr. Balazs, Dr. Brownell and Dr. Gergely hope to apply this physical method to the problem of hydration in biological systems.

Dr. Marie Jakus is continuing her studies on the cornea and lens with the electron microscope.

OPHTHALMIC PLASTICS LABORATORY

This laboratory, directed by Dr. William Stone, Jr., occupies the first floor of the Gardner Building. Four of the rooms have been temperature controlled and converted into an animal farm for monkeys and rabbits. The primary project of this laboratory continues to be the development of plastic artificial corneas to replace scarred corneas. Several scientists of diverse fields have collaborated with this objective in view. Dr. Alfred Marshack is engaged in a study of the healing of corneal tissues through the use of radioisotopes. He has developed an instrument for exact positioning of a Geiger counter, which minimizes errors in radioactivity calculations. Dr. Frederick McGarry of the Massachusetts Institute of Technology is collaborating in a study of changes in plastics as a result of aging and is trying to produce a standard inert plastic for use in the fabrication of the artificial cornea.

An operating slit lamp microscope, foot controlled by means of an hydraulic system, is now in operation at the laboratory and makes possible minute dissection of the cornea essential to plastic replacement.

One hundred thirty-two clinic and private patients have had plastic eyes made in the laboratory during the past year.

RETROLENTAL FIBROPLASIA RESEARCH

Dr. Leona Zacharias and Dr. Julian Chisholm, Jr., with the assistance of Dr. Richard Chapman, are continuing their five year follow-up study of mild and severe retrolental fibroplasia in an attempt to evaluate the degree of ocular and visual damage which results from each stage of the disease. The study is now in the fourth year. This phase of the work is supported by a five year grant from the U. S. Public Health Service.

In addition, the group is about to start experimental animal studies for further investigation of the causation of retrolental fibroplasia. An attempt will be made to examine the mechanism whereby excess oxygen gives rise to retrolental fibroplasia and also to consider causative factors other than oxygen. The experimental work is being supported by grants from the Foundation for Vision and the National Foundation for Eye Research.

BACTERIOLOGY LABORATORY

The Bacteriology Laboratory has maintained its interest in aseptic problems. The high incidence of pathogenic staphylococci in all Boston Hospitals has been a cause of some concern. In the Infirmary, certain housekeeping measures have been introduced which have resulted in a marked reduction of airborne contaminance. Air sampling techniques are being applied to the operating rooms and new methods of blanket sterilization have been undertaken.

Dr. Allen has analyzed the rate of post-operative infections here over the past five years. We are fortunate that it occurs in only 1.6 per thousand cases. This compares very favorably with other similar institutions.

Miss Mangiaracine, our bacteriologist, in association with Dr. Herbert Kaufman, is making a study of the incidence of the various viruses in all forms of corneal ulcers from whatever cause.

EDWIN B. DUNPHY, M.D.
Chief of Ophthalmology

Department of Otolaryngology

THE most important event in the past year has been the opening of our new laboratory addition to the Connecting Building. The service Laboratories of Pathology, Chemistry, Hematology and Bacteriology occupy new quarters with the most modern equipment and exceedingly pleasant working conditions.

The beautiful new Howe Library with its section of Otolaryngology furnishes a stimulation to reading of the current literature and review of the literature of the past. The Research Laboratories of Microcirculation, Atrophic Rhinitis, the Virus Laboratory, the Laboratory on Tinnitus, our new hearing test room for experimental audiology and our new room for the study of cochlear potentials give us an excellent opportunity for fundamental research in Otology and Laryngology.

The action of the Board of Managers in subsidizing the Microcirculatory Laboratory under Dr. John Irwin has demonstrated the interest of the Board in fundamental research having to do with Otology. The vistas of future investigation for fundamental research are many, and we at the Infirmary are just on the verge of starting work which may completely revolutionize our thinking as to the physiology of hearing.

Through the interest of the Massachusetts Institute of Technology in the humanitarian side of science, we have formed a liaison with the Department of Electrical Engineering and an association with the Acoustical Department that may be far reaching in its possibilities. Professor Walter A. Rosenblith and his co-workers at M. I. T., along with the cooperation of Dr. John Irwin and the staff at the Infirmary, are planning a joint effort in fundamental research on the internal ear, a joint effort that will include the Harvard Medical School as well as the Massachusetts Institute of Technology and the Eye and Ear Infirmary. From this association and cooperation, we will be one of the very few institutions in the entire world that will have such a laboratory for the study of fundamental physiology of the middle and internal ear.

EXPANDING RESIDENT TRAINING

During the Second World War and the Korean incident, there was a demand for medical personnel for the military services, and this demand was so great that the civilian hospitals found it exceedingly difficult to properly man their resident staff. Had it not been for our foreign residents, it would have been absolutely impossible to have served efficiently our patients at the Infirmary. We are very proud of our graduates from foreign lands, as we feel that they have taken back our training and teaching to be of service to their native countries. We feel that we have little islands of the Massachusetts Eye and Ear Infirmary scattered all over the world, these islands represented by the influence of these graduates in the medical education of their respective communities.

In conformity with the thinking of the American Board of Otolaryngology, the Section on Medical Education of the American Medical Association, and of the American College of Surgeons, our residency training has been lengthened to 36 months. We are also proud of the fact that, during the past year, we have received approximately 200 applications from would-be residents who desire to receive their education here. These 200 applicants are for the four positions a year; our appointments have been made through 1957-1958 and we have under consideration applicants for 1959.

We are happy, too, that the Board of Managers accepted our recommendations and appointed Dr. George F. Reed, Dr. William Montgomery and Dr. Robert L. Klotz as full-time assistants to the Chief. The supervision of resident training, the supervision of the Clinics, the supervision of under-graduate teaching and active participation on many of the committees serving the hospital have been delegated to the assistants. The teaching of under-graduate students, the training of the residents and the general welfare of the patients of the hospital have never operated more efficiently or as smoothly as at the present time.

In looking into the future, it is our desire to pick one or two graduates every year who will be supported by a special grant for additional study with us. We are desirous of furnishing further training in teaching, in research and in specialized field of a fourth, fifth, or even a sixth year after graduation from our three-year residency training. It would be these men, we would expect, who would fill the professional opportunities now going begging for qualified Otolaryngologists. It is from this group that we would expect the leaders of the future to be developed.

One of the main problems that our staff has to face is the shortage of beds at the hospital, the scarcity of operating time, and of course, the shortage of nurses. The Massachusetts Eye and Ear Infirmary of the future should be of sufficient size and of sufficient bed accommodations so that the members of the staff would not need to search the city over for a vacant bed for the care of their patients. There is not one member of our staff that would not prefer to operate and take care of his patients at the Infirmary. The increased efficiency of doing all his work under one roof is self-evident. Perhaps the hospital of the future will have quarters for doctors' offices so that the entire day can be spent in close proximity to his patients in the hospital, both service and private. Such a visualization in this motor age demands, of course, sufficient parking space.

CHANGES IN PRACTICE

Over the past 10 or 15 years, there have been many articles in the current medical literature that deal with the changing world in which we are living and the changing type of disease that we are seeing. We here at the Infirmary have been well aware of the changes in the practice of medicine. Today our greatest problem is that of cancer. The reputation of the Infirmary is such that we attract many cancer cases not only from New England but from foreign lands. The antibiotics, improved anesthesia, improved techniques have brought us a wealth of clinical material. Better diagnosis of patients and doctors being cancer conscious have filled our wards with cancer cases. The operation for the removal of the larynx because of cancer has become standardized, simplified and such a common occurrence that it no longer is a curiosity.

Of the 415 such operations done in the last eight years, 79 were done in the year 1956. In the past eight years, 196 radical neck resections were performed. In the past year, 42 of these operations were combined with a total laryngectomy.

In the 1940s, the fenestration operation for deafness was being perfected and the staff of the Infirmary had much to do with the perfection and refinement of that operation. During the last five years, the stapes mobilization has been revived and again our staff is playing a major role in the surgical mobilization of the stapes and proper evaluation of the results. The mobilization of the stapes is a much simpler operation; hospitalization averages 48 hours; it is done under local anesthesia and apparently in properly selected cases; the results are as good as those of the fenestration operation.

In 1940, we established one of the first clinics for the deaf. Since then, an entirely new profession has entered our field—the audiologist. The concept of the rehabilitation of the hard of hearing patient is accepted everywhere throughout our land. Hearing centers have been established in many cities and in many clinics. The hard of hearing patient is receiving better service today than ever before and we are proud that we showed the way with one of the original clinics.

The members of our staff continue to be in demand as guest lecturers, speakers at many of our national and local medical society meetings, and many of them serve as officers of our medical societies. Your Chief of Service takes great pride in being elected President of the American Laryngological Society, the oldest nose and throat society in the world and also the most select. He also takes pride in being President-elect of the American Academy of Ophthalmology and Otolaryngology, the largest and most democratic such society in this or any other country.

LeRoy A. Schall, M.D.
Chief of Otolaryngology

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Montgomery, William W. (See REED, George F.)

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PERONE, Piero M. "Situs Viscerum Inversus, Bronchiettasie e Sinusiti; Tre Casi di Sindrome di Kartagener." Arch. ital. otol. 67:653-665, Sept.-Oct. 1956.

Reed, George F. (See HOLMES, Edgar M.)

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Weille, Francis L. (See IRWIN, John W.)

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* * *

Directory

MEMBERS OF INFIRMARY STAFF, ALUMNI AND RESIDENTS

Names of members of the Infirmary Staff are printed in capital letters.

Abbreviations following the name indicate to what service of the Infirmary the individual belongs:

Oph.; Ophthalmology
Otolar.; Otolaryngology
Bron.; Bronchoscopy
Esoph.; Esophagoscopy

Letters in small type preceding the abbreviations indicate the special work of the individual:

a; assistant
an.; anesthetist
assoc.; associate
c.; chief of service
cons.; consulting
dir.; director
exec. a.; executive assistant
fel. res.; fellow in research
grad.; graduate
path.; pathologist
r.; resident
roent.; roentgenologist
s.; surgeon
s.p.o.; surgeon for plastic operations
s.t.c.; surgeon assigned to Tumor Clinic

As of May, 1957

Adams, Samuel T., Oph. 1951
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Alexander, Seeyman L., Aural 1919
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ALLEN, HENRY F. (a.s. Oph.), Oph. 1949
200 Beacon, Boston, Mass.

Allen, John H., Aural 1904
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ALLMAN, CHARLES H. (s. Otolar.), Otolar. 1930
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Ayash, John J., Otolar. 1946
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Bahn, Gustave C., Oph. 1948
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Bair, Hugo L., Oph. 1932
102-110 Seemd Ave., S.W. Rochester, Minn.

BALAZS, ENDRE (assoc. dir. of Retina Fd.)
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Ballenger, John J., Otolar. 1943
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Bassen, Edward J., Oph. 1928
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Bauer, Frederick, Aural 1902

BECHTEL, EDWARD J. (r. Oph.)

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Black, Daniel E., Otolar. 1944
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Bobbett, Gordon H., Otolar. 1948
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BOGAN, FREDERICK L. (cons. s. Otolar.),
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Brown, Lester A., Jr., Otolar. 1937
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Bryan, Burton D., Otolar. 1943
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BULLINGTON, S. JAMES (a. Oph.), Oph. 1956
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Candray, Carlos H., Oph. 1944
San Salvador, El Salvador, C. A.

Caron, Armand L., Otolar. 1927
Medical Arts Bldg., Worcester, Mass.

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Case, Paul H., Oph. 1938
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CASTEN, VIRGIL G. (s. Oph.), Oph. 1931
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Cave, Linus S., Otolar. 1927
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Cerrato, Calvin M., Otolar. 1944
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Chamberlain, Calvin B., Oph. 1944
342 Investment Bldg., Pomona, Cal.

CHANDLER, PAUL A. (s. Oph.), Oph. 1925
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CHAPMAN, RICHARD B. (a. Oph.), Oph. 1955
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CHISHOLM, JULIAN F., JR. (a. s. Oph.)
34½ Beacon, Boston, Mass.
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Clarke, Samuel T., Oph. 1939
505 Medico-Dental Bldg., Reno, Nev.

CLOUGH, JOSEPH M. (a. s. Oph.), Otolar. 1939,
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COGAN, DAVID G. (s. Oph.), Oph. 1935
dir. Howe Lab.
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Cogan, James R., Oph. 1944
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Cooper, Kemp G., Otolar. 1940
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Coyle, John A., Oph. 1931
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Day, Kenneth, Otolar. 1924
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Dean, Abbott W., Oph. 1929
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Dietrich, Herbert J., Otolar. 1951
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Donoghue, William F., Otolar. 1942, Oph. 1944
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Dowling, Joseph L., Oph. 1918
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DOWLING, JOSEPH L., JR. (r. Oph.)

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DROOKER, J. CHARLES (assoc. s. Otolar.), Otolar. 1939
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Drury, Dana W., Aural 1906
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Evans, William H., Oph. 1924
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Farrell, James I., Oph. 1932
301 Kempf Bldg., Utica, N. Y.

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Fink, Robert J., Oph. 1955
5408 York Ave., S., Minneapolis, Minn.

Filmer, George A., Oph. 1939
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Fisher, Stanwood E., Aural 1909
338 Spring, Portland, Me.

Floyd, Paul E., Oph. 1946
2 Middle, Farmington, Me.

Foote, Charles M., Oph. 1940
412 No. Hastings Ave., Hastings, Neb.

Frackleton, Ralph J., Otolar. 1933
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Frame, Stuart M., Otolar. 1956
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Franklin, C. **Ray,** Oph. 1931
10 E. 90th, N. Y. C.

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1180 Beacon, Brookline, Mass.
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Fultz, William E., Oph. 1927
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Gabriels, Joseph A. D., Oph. 1921
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Gaudreau, Honore E., Oph. 1930
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Germain, Harry H., Oph. 1899
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Gifford, Harold, Jr., Oph. 1934
1620 Medical Arts Bldg., Omaha, Neb.

Gilbert, John J., Oph. 1917, Aural 1920
209 Angell, Providence, R. I.

Giller, Herbert, Oph. 1952
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Gillespie, Elmer H., Otolar. 1932

Ginsberg, Joseph, Oph. 1953
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GOHD, ROBERT S. (res. vir.)
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Goldcamp, Richard R., Otolar. 1948
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Goldman, A. **Milton,** Oph. 1924
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GOODALE, JOSEPH L. (cons. s. Otolar.)
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Eye & Ear Hospital, 500 S. Lucas Ave.,
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Kearny, Richard A., Aural & Lar., 1921
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Kerst, J. Arthur, Oph. 1934
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King, David G., Otolar. 1951
605 Commonwealth Ave., Boston, Mass.

KING, MERRILL J. (cons. s. Oph.), Oph. 1932
22 White, Rockland, Me.

King, Merrill J., Jr., Oph. 1956
22 White, Rockland, Me.

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243 Charles, Boston, Mass.

Kos, Claire M., Otolar. 1941
University Hospital, Iowa City, Iowa

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243 Charles, Boston, Mass.

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46 Pleasant, Concord, N. H.

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635 W. 165th, N. Y. C.

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MARTIN, S. FORREST (a. s. Oph.), Oph. 1938
Leave of absence

Martinez, Daniel E. M., Otolar. 1953
Scott & White Clinic, Temple, Tex.

Mattis, Robert Dean, Oph. 1942
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McCall, Robert E., Otolar. 1938
236 So. Main, Marion, N. C.

McClintock, Walter L., Otolar. 1938

McEneaney, Joseph P., Otolar. 1947
301 Essex, Lawrence, Mass.

McGuigan, G. Edmund, Oph. 1924
26 W. King, York, Pa.

McIntire, Frederic J., Oph. 1910
63 N. Common, Lynn, Mass.

McINTIRE, FREDERIC J., JR. (a. Otolar.)
63 N. Common, Lynn, Mass.

McKEIGUE, JOHN E. (assoc. s. Otolar.),
Otolar. 1949
247 Commonwealth Ave., Boston, Mass.
94 Pleasant Ave., Arlington, Mass.

McKenzie, Rodney J., Otolar. 1942
480 Doctors' Bldg., 19 Garfield Pl.,
Cincinnati, Ohio

McLeod, Angus M., Otolar. 1942
Medical Arts Bldg., Toronto, Ont., Canada

McLeod, John, Oph. 1930
209 Tower Bldg., 116 W. 47th, Kansas City, Mo.

Meek, Raymond E., Oph. 1926
729 Park Ave., N. Y. C.

MELTZER, PHILIP E. (s. Otolar.), Aural 1919,
Winthrop Fd.
285 Commonwealth Ave., Boston, Mass.

Mertins, Paul S., Otolar. 1936
32 Clayton, Montgomery, Ala.

Messenger, Harry K., Oph. 1934
140 Marlborough, Boston, Mass.

Meyer, Monto F., Oph. 1919
904 Canal Bank Bldg., New Orleans, La.

MILAM, DANIEL F. (a. Oph.), Oph. 1955
Leave of absence

Miles, Nathan E., Oph. 1937
1031 S. 21st, Birmingham, Ala.

MILLER, DANIEL (assoc. s. Otolar.), Otolar. 1943
403 Commonwealth Ave., Boston, Mass.

Mills, Lloyd, Jr., Oph. 1947
609 S. Grand Ave., Los Angeles, Calif.

MONTGOMERY, WILLIAM W. (a. Otolar.),
Otolar. 1955, a. to c. of Otolar.
243 Charles, Boston, Mass.

Moore, Donald E., Oph. 1937
417 Medical Arts Bldg., Syracuse, N. Y.

Moore, Edward E., Oph. 1944
706 Flatiron Bldg., Asheville, N. C.

Moore, James A., Otolar. 1940
525 E. 68th, N. Y. C.

Moorman, John D., Oph. 1939
Times Bldg., Huntsville, Ala.

MORRISSEY, ARTHUR M. (a. Oph.)
24 Rural Ave., Medford, Mass.

MOSHER, HENRY A. (a. s. Oph.), Oph. 1941
266 Beacon, Boston, Mass.

Moteley, Frederick E., Otolar. 1925
Charlotte Eye & Ear Hospital, Charlotte, N. C.

Moulton, Everett C., Jr., Oph. 1948
1214 North B., Fort Smith, Ark.

MUELLER, WERNER, Otolar. 1933
dir. Otolar. path. & Mosher Lab.
243 Charles, Boston, Mass.

Murphy, William E., Otolar. 1933
Slater Bldg., Worcester, Mass.

Myers, Roscoe W., Oph. 1927
36 Pleasant, Worcester, Mass.

Myers, Stanley A., Otolar. 1937
2218 Market, Youngstown, Ohio

MYSEL, PHILIP (cons. s. Otolar.)
79 Bay State Rd., Boston, Mass.

Nachlas, N. Edward, Otolar. 1951
Latrobe Bldg., Charles & Read, Baltimore, Md.

Navas, Luis, Otolar. 1950
Apartado N. 376, Managua, Nicaragua, C. A.

Nicholson, Harry M., Aural 1913
515 Medical Arts Bldg., Hamilton, Ont., Canada

O'Connell, John D., Oph. 1943
50 Farmington Ave., Hartford, Conn.

O'Connor, Michael John, Aural & Lar. 1923
105 Waterman, Providence, R. I.

OFFENBACH, BERTHA (a. Oph.)
51 Homer, Newton Centre, Mass.

Ogden, Frederic W., Otolar. 1942
Cravens Bldg., Fayetteville, Ark.

OKAMURA, ICHIRO D. (a. Oph.), Oph. 1952
327 Charles, Boston, Mass.

Olds, Bomar A., Otolar. 1929
124 W. Princeton Ave., College Park, Ga.

OLIVE, GEORGE M. (r. Oph.)

OLSEN, HENRIETTA I., R.N. (exec. a.)
243 Charles, Boston, Mass.

Parker, Harry C., Oph. 1902

Patterson, William J., Otolar. 1956
225 W. Georgia, Vancouver 1, B. C.

PAVLO, IRVING (a. Oph.)
520 Beacon, Boston, Mass.
50 Shepard, Cambridge, Mass.

Perreten, Frank A., Oph. 1957
210 Reynolds Bldg., Winston-Salem, N. C.

Perone, Piero, Otolar. 1955
119 East 74th, N. Y. C.

Pfister, Raymond L., Otolar. 1952
1298 Herschel Ave., Cincinnati, Ohio

PIPPITT, RICHARD B. (a. s. Oph.), Oph. 1949
328 Washington, Wellesley Hills, Mass.

PIRQUET, SILVIO (fel. in Oph.)

POIRIER, GEORGE H. (cons. s. Otolar.)
60 Bay State Rd., Boston, Mass.

POLLEN, ABRAHAM (a. s. Oph.), Oph. 1944
636 Beacon, Boston, Mass.

Pollock, Frederic J., Otolar. 1935

Poppen, Mayo J., Oph. 1948
6356½ Van Nuys Blvd., Van Nuys, Cal.

Posner, Marvin, Oph. 1952
371 State, Albany, N. Y.

Price, R. Raymond, Oph. 1936
118 Rutledge Ave., Charleston, S. C.

Provost, Adolphe J., Otolar. 1927
1458 Elm, Manchester, N. H.

Prudhon, Charles A., Otolar. 1927
168 Sterling, Watertown, N. Y.

Quevedo, A. Arturo, Oph. 1933
4a Ave., Sur 19, Guatemala City, Guatemala, C. A.

Quevedo, Julio, Otolar. 1941
15 Calle 6 - 59, Guatemala City, Guatemala, C. A.

Ragan, John D., Oph. 1954
736 Granville, Vancouver 2, B. C.

Rambo, J. H. Tom, Otolar. 1948
535 Park Ave., N. Y. C.

Raynes, Alphonse F., Oph. 1923
16 Market Sq., Portsmouth, N. H.

Reagan, Daniel J., Oph. 1943, Otolar. 1944
507 Main, Worcester, Mass.

REED, GEORGE F. (a. s. Otolar. & a. to c. of Otolar.), Otolar. 1952
243 Charles, Boston, Mass.

REGAN, CHARLES D. J. (a. Oph.), Oph. 1953
520 Commonwealth Ave., Boston, Mass.

Rice, Earle W., Otolar. 1953
390 Main, Worcester, Mass.

Rice, Theodore A., Oph. 1942
390 Main, Worcester, Mass.

RICHARDS, LYMAN G. (cons. s. Otolar.), Otolar. 1924
Medical Dept., M.I.T., Cambridge, Mass.

RICHARDSON, JOHN R. (s. Bron. & Esoph.), Otolar. 1935
403 Commonwealth Ave., Boston, Mass.

RIEMER, KARL (a. s. Oph.), Oph. 1943
403 Commonwealth Ave., Boston, Mass.

RIFE, CHARLES J. (r. Oph.)

RING, HENRY G. (r. Oph.)

ROBINSON, MENDELL (r. Otolar.)

ROGERS, WILLIAM P. (a. Otolar.)
264 Beacon, Boston, Mass.

ROOPENIAN, ARAM (a.s.p.o.), Otolar. 1944
475 Commonwealth Ave., Boston, Mass.

ROSENTHAL, MORTON L. (fel. in Oph.)

Ross, Percy J., Otolar. 1935
1045 Michigan Ave., Chicago, Ill.

Rothwell, Stephen C., Otolar. 1925
Nonquitt, Mass.

RUBEN, MAURICE (a. s. Otolar.)
151 Maple, Springfield, Mass.

RUGGLES, RALPH H. (cons. s. Oph.), Oph. 1920
394 Marlborough, Boston, Mass.

RUNGE, PAUL M. (a. Oph.)
140 Marlborough, Boston, Mass.
47 W. Elm, Brockton, Mass.

SACHS, BARUCH (r. Oph.)

SACHS, BENJAMIN (cons. s. Oph.), Oph. 1925
636 Beacon, Boston, Mass.

SADE, JACOB (r. Otolar.)

Saeed, Yunis M., Otolar. 1954
3425 Geary Ave., San Francisco, Cal.

Sainsbury, Augustus W., Otolar. 1943
42 N. Main, Canandaigua, N. Y.

Sam, James M., Otolar. 1949
Jones Eye, Ear, Nose & Throat Hospital, Johnson City, Tenn.

Sargent, Francis B., Aural & Lar., 1923
124 Waterman, Providence, R. I.

Savage, Ross E., Oph. 1910
Gloucester, Mass.

Scarney, Herman D., Oph. 1928
573 Fisher Bldg., Detroit, Mich.

SCHALL, LeROY A. (c. Otolar.)
243 Charles, Boston, Mass.

SCHEPENS, CHARLES L. (a. s. Oph.), dir. Retina Fd.
327 Charles, Boston, Mass.

Schnebly, J. Thomas, Oph. 1936
11134 Georgia Ave., Silver Spring, Md.

SCOTT, ALFRED W. (a. Oph.), Oph. 1955
7 Bay State Rd., Boston, Mass.

SCOTT, DAVID H. (a. Oph.), Oph. 1949
7 Thorndike, Beverly, Mass.

SEALE, EARL S. (a. s. Oph.), Oph. 1940
126 Bay State Rd., Boston, Mass.

Shambaugh, George E., Jr., Otolar. 1932
55 E. Washington, Chicago, Ill.

Shea, John J., Otolar. 1953
3259 Overland Pl., Memphis, Tenn.

SHEA, MICHAEL (fel. in Oph.)

Sheehan, Linus A., Oph. 1943
210 Angell, Providence, R. I.

Sherman, Morris, Otolar. 1950
82 W. Commerce, Bridgeton, N. J.

SHLOSSBERG, FRANK R. (a. s. Otolar.)
116 Emerson, Haverhill, Mass.

Skilling, Francis C., Oph. 1933
442 Ingram Bldg., Miami, Fla.

Slaughter, Earl C., Otolar. 1940
Granada Bldg., Norfolk, Neb.

SLOANE, ALBERT E. (assoc. s. Oph.)
416 Marlborough, Boston, Mass.

Smith, Harold, Otolar. 1937
1149 N. Garvey Ave., Pomona, Cal.

SMITH, TAYLOR R., Oph. 1951, dir. Oph. Path.
243 Charles, Boston, Mass.

Smith, William L., Oph. 1950
U. S. Naval Hosp., Phil., Pa.

Snow, Robert C., Otolar. 1940
508 E. S. Temple, Salt Lake City, Utah

Spinola, Edmund T. L., Otolar. 1954
Rua Da Graca 19, Bahia, Brazil, S. A.

Spratt, Charles N., Oph. 1904
1231 Medical Arts Bldg., Minneapolis, Minn.

Stapff, Volker H., Otolar. 1952
Agraciada 1640, Montevideo, Uruguay, S. A.

STEMMER, AUGUST (r. Otolar.)

Stephens, H. Frederick, Oph. 1939
195 Thayer, Providence, R. I.

STERNSTEIN, HERMAN J. (assoc. s. Otolar.)
54 Winter, Norwood, Mass.

STONE, WILLIAM, JR. (a. Oph.), Oph. 1949
243 Charles, Boston, Mass.
1101 Beacon, Brookline, Mass.

STONECYPHER, DAVID (r. Oph.)

Sudarsky, Raymond D., Oph. 1956
76 Canterbury, Hartford, Conn.

SULLIVAN, GARRETT L. (a. s. Oph.), Oph. 1938
101 Bay State Rd., Boston, Mass.

SWARTZ, MORRIS (a. Otolar.)
18 Broad, Lynn, Mass.

SWEEBE, EDWARD C. (r. Oph.)

TAYLOR, IRWIN S. (r. Oph.)

Tegelberg, Julius, Otolar. 1931
390 Main, Worcester, Mass.

Thomas, John H., Otolar. 1944, Oph. 1946
262 E. Market, Warren, Ohio

Thorlakson, Neil F., Oph. 1956
916 Cobb Bldg., Seattle, Wash.

Toot, J. Frederick, Oph. 1922
520 First Nat'l Bank Bldg., Canton, Ohio

TROTTER, ROBERT R. (a. Oph. & a. to c. of Oph.), Oph. 1951
243 Charles, Boston, Mass.

TUCKER, DONALD P. (r. Oph.)

Twitchell, Marshall C., Oph. 1941
217 S. Union, Burlington, Vt.

Vail, Derrick T., Oph. 1924
700 N. Michigan Ave., Chicago, Ill.

VERHOEFF, FREDERICK H. (cons. s. Oph.)
395 Commonwealth Ave., Boston, Mass.

Viger, Roland J., Oph. 1937
Medical Bldg., 710 Drummond, Montreal, Que., Canada

VOGELI, RICHARD (fel. in Otolar.)

WALKER, D. HAROLD (cons. s. Otolar.), Aural 1902
Peterborough, N. H.

Wattles, F. Merrill, Otolar. 1938
1200 S. Kuhl Ave., Orlando, Fla.

WATZKE, ROBERT (fel. in Oph.)

Webster, Franklin R., Oph. 1926
810 State Tower Bldg., Syracuse, N. Y.

WEBSTER, RICHARD C., JR. (a. Otolar.)
1101 Beacon, Brookline, Mass.

WEILLE, FRANCIS L. (s. Otolar.), Otolar. 1929
247 Commonwealth Ave., Boston, Mass.

Weisman, Herman J., Otolar. 1944
76 Limerock, Rockland, Me.

WEST, FRANCIS J. (a. s. Oph.), Oph. 1947
195 Ashmont, Dorchester, Mass.

WHITE, LEON E. (cons. s. Otolar.), Aural & Lar. 1923
15 Bay State Rd., Boston, Mass.

Whitney, Raymond C., Oph. 1922
227 Union, New Bedford, Mass.

WILKER, SYDNEY R. (a. Otolar.)
285 Commonwealth Ave., Boston, Mass.

WILKINS, SAMUEL H. (cons. s. Oph.)
270 Commonwealth Ave., Boston, Mass.

Willis, Harry C., Aural & Lar. 1923
Willis Bldg., Wilson, N. C.

Winkler, Herman A., Otolar. 1926
224 Thayer, Providence, R. I.

Wishart, David E. S., Aural & Lar. 1922
170 St. George, Toronto, Ont., Canada

Woodard, M. Wayne, Oph. 1950
517-519 Flat Iron Bldg., Asheville, N. C.

WOODWARD, ARTHUR (r. Otolar.)

Wright, Clarence F., Otolar. 1931
Weston, Ont., Canada

Wright, Edward N., Otolar. 1933
106 Med. Arts Bldg., Port Arthur, Ont., Canada

ZACHARIAS, LEONA (biol.)
243 Charles, Boston, Mass.

Zanek, Otto L., Oph. 1946
1610 Medical Towers, Houston, Tex.

ZAVALIA, JULIO U. (r. Otolar.)

ZEAVIN, BERNARD (a. Oph.), Oph. 1954
(Military leave of absence)

ZONDERMAN, BERNARD (a. s. Otolar.), Otolar. 1946
285 Commonwealth Ave., Boston, Mass.

ZOVICKIAN, ANTHONY (a. Otolar.)
270 Commonwealth Ave., Boston, Mass.

In Memoriam

HAROLD G. TOBEY, M.D.

Consulting Surgeon in Otolaryngology

December 22, 1884 — December 26, 1955

1915 — Resident in Aural Service
1925 — Associate Surgeon in Otolaryngology
1933 — Surgeon in Otolaryngology
1946 — Consulting Surgeon in Otolaryngology

J. HERBERT WAITE, M.D.

Consulting Surgeon in Ophthalmology

November 24, 1889 — February 23, 1957

1923 — Resident in Ophthalmology
1926 — Assistant Surgeon in Ophthalmology
1930 — Associate Surgeon in Ophthalmology
1931 — Surgeon in Ophthalmology
1932 — Acting Chief of Ophthalmology
1936 — Chief of Ophthalmology
1940 — Consulting Surgeon in Ophthalmology

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